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Slider NSW/NSA

Robust zinc plated steel slider with ball bearings, self-centering heads with wipers, longitudinal seals to protect the internal components and a top sealing strip to prevent accidental tampering of the fixed rollers. The slider body is accurately finished with matte longitudinal edge chamfer and a shining ground flat surface. It is available for all sizes, configurable with up to six rollers depending on the load requirement.

Standard sliders are supplied with rollers with 2Z steel disc seals. For dusty environment and splash-proof applications, 2RS rubber seal rollers are available.

All NSA-sliders, which are made for rail type K, have rollers with circular cross profile. The main load direction should always be on the largest number of the slider-wheels and those wheels should always run on the V-shaped raceway of the K-Rail. So for a typical slider with 3 wheels, the two outer wheels should carry the majority of the load and run in the V-shape and the third (middle) wheel should run on the flat raceway in the K-Rail.

All NSW/NSA sliders have wipers assembled and the wipers for K-Rails are adapted to work on the two different raceway shapes.

Dimensions in mm.

Material: DIN 11SMnPb28. Zinc-plated according to ISO 2081.

Max. Radial Load Capacity (N): 15,000 (per slider)

Temperature range (°C): -20 to +120



General Data

Designation	Size	Max. Speed (m/s)	Max. Acceleration (m/s)	Roller type	Number of rollers
NSW18-3-2RS	18	3	10	CPA18-CPN18	3
NSW18-3-2Z	18	3	10	CPA18-CPN18	3
NSW18-4A-2RS	18	3	10	CPA18	4
NSW18-4A-2Z	18	3	10	CPA18	4
NSW18-4B-2RS	18	3	10	CPA18	4
NSW18-4B-2Z	18	3	10	CPA18	4
NSW18-5-2RS	18	3	10	CPA18	5
NSW18-5-2Z	18	3	10	CPA18	5
NSW18-6A-2RS	18	3	10	CPA18	6
NSW18-6A-2Z	18	3	10	CPA18	6
NSW18-6B-2RS	18	3	10	CPA18	6
NSW18-6B-2Z	18	3	10	CPA18	6
NSW28-3-2RS	28	5	15	CPA28-CPN28	3
NSW28-3-2Z	28	5	15	CPA28-CPN28	3
NSW28-4A-2RS	28	5	15	CPA28	4
NSW28-4A-2Z	28	5	15	CPA28	4
NSW28-4B-2RS	28	5	15	CPA28	4
NSW28-4B-2Z	28	5	15	CPA28	4
NSW28-5-2RS	28	5	15	CPA28	5
NSW28-5-2Z	28	5	15	CPA28	5
NSW28-6A-2RS	28	5	15	CPA28	6
NSW28-6A-2Z	28	5	15	CPA28	6
NSW28-6B-2RS	28	5	15	CPA28	6
NSW28-6B-2Z	28	5	15	CPA28	6
NSW43-3-2RS	43	7	15	CPA43-CPN43	3
NSW43-3-2Z	43	7	15	CPA43-CPN43	3
NSW43-4A-2RS	43	7	15	CPA43	4
NSW43-4A-2Z	43	7	15	CPA43	4
NSW43-4B-2RS	43	7	15	CPA43	4
NSW43-4B-2Z	43	7	15	CPA43	4
NSW43-5-2RS	43	7	15	CPA43	5
NSW43-5-2Z	43	7	15	CPA43	5
NSW43-6A-2RS	43	7	15	CPA43	6
NSW43-6A-2Z	43	7	15	CPA43	6
NSW43-6B-2RS	43	7	15	CPA43	6
NSW43-6B-2Z	43	7	15	CPA43	6
NSA43-3-2RS	43	7	15	CRPA43-CRPN43	3
NSA43-3-2Z	43	7	15	CRPA43-CRPN43	3
NSA43-4A-2RS	43	7	15	CRPA43	4
NSA43-4A-2Z	43	7	15	CRPA43	4

General Data

Designation	Size	Max. Speed (m/s)	Max. Acceleration (m/s)	Roller type	Number of rollers
NSA43-4B-2RS	43	7	15	CRPA43	4
NSA43-4B-2Z	43	7	15	CRPA43	4
NSA43-5-2RS	43	7	15	CRPA43	5
NSA43-5-2Z	43	7	15	CRPA43	5
NSA43-6A-2RS	43	7	15	CRPA43	6
NSA43-6A-2Z	43	7	15	CRPA43	6
NSA43-6B-2RS	43	7	15	CRPA43	6
NSA43-6B-2Z	43	7	15	CRPA43	6
NSW63-3-2ZR	63	9	20	CPA63	3
NSW63-4A-2ZR	63	9	20	CPA63	4
NSW63-4B-2ZR	63	9	20	CPA63	4
NSW63-5-2ZR	63	9	20	CPA63	5
NSW63-6A-2ZR	63	9	20	CPA63	6
NSW63-6B-2ZR	63	9	20	CPA63	6
NSA63-3-2ZR	63	9	20	CRPA63	3
NSA63-4A-2ZR	63	9	20	CRPA63	4
NSA63-4B-2ZR	63	9	20	CRPA63	4
NSA63-5-2ZR	63	9	20	CRPA63	5
NSA63-6A-2ZR	63	9	20	CRPA63	6
NSA63-6B-2ZR	63	9	20	CRPA63	6

Designation	Number of Fixing Holes
NSW18-3-2RS	4
NSW18-3-2Z	4
NSW18-4A-2RS	2
NSW18-4A-2Z	2
NSW18-4B-2RS	2
NSW18-4B-2Z	2
NSW18-5-2RS	4
NSW18-5-2Z	4
NSW18-6A-2RS	3
NSW18-6A-2Z	3
NSW18-6B-2RS	3
NSW18-6B-2Z	3
NSW28-3-2RS	4
NSW28-3-2Z	4
NSW28-4A-2RS	2
NSW28-4A-2Z	2
NSW28-4B-2RS	2
NSW28-4B-2Z	2
NSW28-5-2RS	4

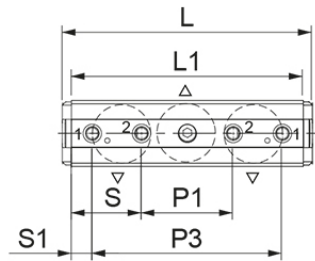
General Data

Designation	Number of Fixing Holes
NSW28-5-2Z	4
NSW28-6A-2RS	3
NSW28-6A-2Z	3
NSW28-6B-2RS	3
NSW28-6B-2Z	3
NSW43-3-2RS	4
NSW43-3-2Z	4
NSW43-4A-2RS	2
NSW43-4A-2Z	2
NSW43-4B-2RS	2
NSW43-4B-2Z	2
NSW43-5-2RS	4
NSW43-5-2Z	4
NSW43-6A-2RS	3
NSW43-6A-2Z	3
NSW43-6B-2RS	3
NSW43-6B-2Z	3
NSA43-3-2RS	4
NSA43-3-2Z	4
NSA43-4A-2RS	2
NSA43-4A-2Z	2
NSA43-4B-2RS	2
NSA43-4B-2Z	2
NSA43-5-2RS	4
NSA43-5-2Z	4
NSA43-6A-2RS	3
NSA43-6A-2Z	3
NSA43-6B-2RS	3
NSA43-6B-2Z	3
NSW63-3-2ZR	4+4
NSW63-4A-2ZR	5
NSW63-4B-2ZR	5
NSW63-5-2ZR	6
NSW63-6A-2ZR	7
NSW63-6B-2ZR	7
NSA63-3-2ZR	4+4
NSA63-4A-2ZR	5
NSA63-4B-2ZR	5
NSA63-5-2ZR	6
NSA63-6A-2ZR	7
NSA63-6B-2ZR	7

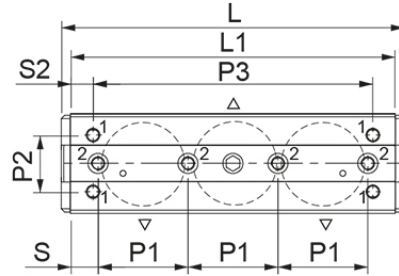
Dimensions

Size 18 - 28 - 43
(Use only the 2 fixing holes type 1 or 2)

NSW/NSA...3

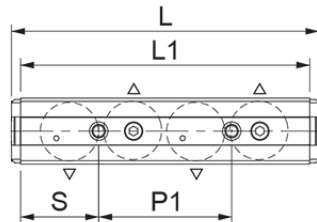


Size 63
(Use only the 4 fixing holes type 1 or 2)

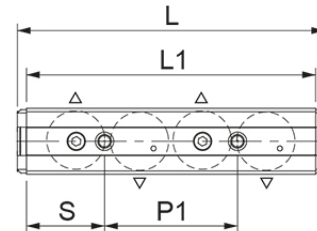


Configuration A

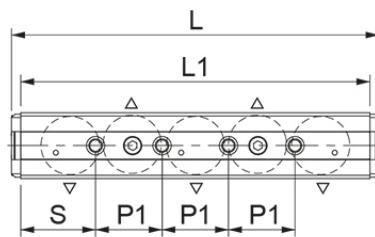
NSW/NSA...4



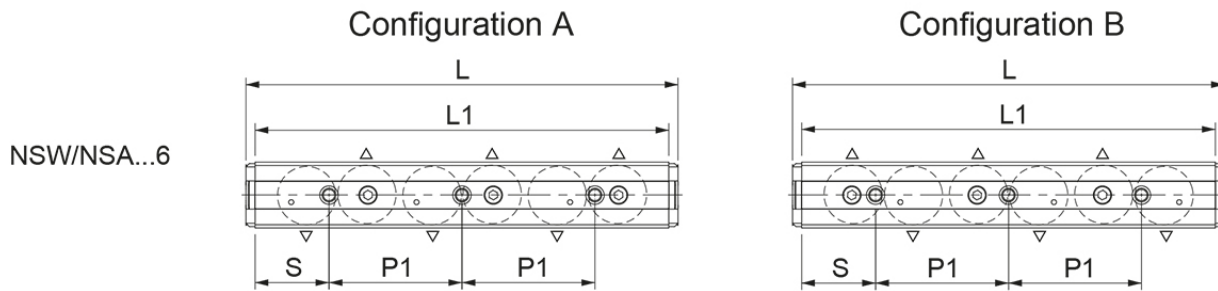
Configuration B



NSW/NSA...5

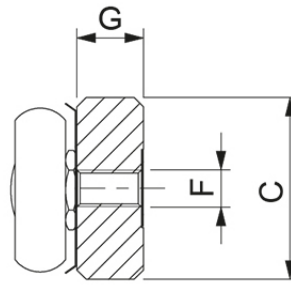
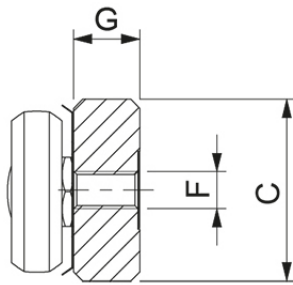


Dimensions



NSW-slider with prismatic rollers
for use in T- and U-rails

NSA-slider with crowned rollers
for use in K-rails



Designation	L1	L	C	G	F	P1	P2	P3	S
NSW18-3-2RS	70	78	16	7.2	M5	20	-	52	25
NSW18-3-2Z	70	78	16	7.2	M5	20	-	52	25
NSW18-4A-2RS	92	100	16	7.2	M5	40	-	-	26
NSW18-4A-2Z	92	100	16	7.2	M5	40	-	-	26
NSW18-4B-2RS	92	100	16	7.2	M5	40	-	-	26
NSW18-4B-2Z	92	100	16	7.2	M5	40	-	-	26
NSW18-5-2RS	112	120	16	7.2	M5	20	-	-	26
NSW18-5-2Z	112	120	16	7.2	M5	20	-	-	26
NSW18-6A-2RS	132	140	16	7.2	M5	40	-	-	26
NSW18-6A-2Z	132	140	16	7.2	M5	40	-	-	26
NSW18-6B-2RS	132	140	16	7.2	M5	40	-	-	26
NSW18-6B-2Z	132	140	16	7.2	M5	40	-	-	26
NSW28-3-2RS	97	108	24.9	9.7	M5	35	-	78	31
NSW28-3-2Z	97	108	24.9	9.7	M5	35	-	78	31
NSW28-4A-2RS	117	128	24.9	9.7	M5	50	-	-	33.5
NSW28-4A-2Z	117	128	24.9	9.7	M5	50	-	-	33.5
NSW28-4B-2RS	117	128	24.9	9.7	M5	50	-	-	33.5
NSW28-4B-2Z	117	128	24.9	9.7	M5	50	-	-	33.5
NSW28-5-2RS	142	153	24.9	9.7	M5	25	-	-	33.5

Dimensions

Designation	L1	L	C	G	F	P1	P2	P3	S
NSW28-5-2Z	142	153	24.9	9.7	M5	25	-	-	33.5
NSW28-6A-2RS	167	178	24.9	9.7	M5	50	-	-	33.5
NSW28-6A-2Z	167	178	24.9	9.7	M5	50	-	-	33.5
NSW28-6B-2RS	167	178	24.9	9.7	M5	50	-	-	33.5
NSW28-6B-2Z	167	178	24.9	9.7	M5	50	-	-	33.5
NSW43-3-2RS	139	150	39.5	14.5	M8	55	-	114	42
NSW43-3-2Z	139	150	39.5	14.5	M8	55	-	114	42
NSW43-4A-2RS	174	185	39.5	14.5	M8	80	-	-	47
NSW43-4A-2Z	174	185	39.5	14.5	M8	80	-	-	47
NSW43-4B-2RS	174	185	39.5	14.5	M8	80	-	-	47
NSW43-4B-2Z	174	185	39.5	14.5	M8	80	-	-	47
NSW43-5-2RS	210	221	39.5	14.5	M8	40	-	-	45
NSW43-5-2Z	210	221	39.5	14.5	M8	40	-	-	45
NSW43-6A-2RS	249	260	39.5	14.5	M8	80	-	-	44.5
NSW43-6A-2Z	249	260	39.5	14.5	M8	80	-	-	44.5
NSW43-6B-2RS	249	260	39.5	14.5	M8	80	-	-	44.5
NSW43-6B-2Z	249	260	39.5	14.5	M8	80	-	-	44.5
NSA43-3-2RS	139	150	39.5	14.5	M8	55	-	114	42
NSA43-3-2Z	139	150	39.5	14.5	M8	55	-	114	42
NSA43-4A-2RS	174	185	39.5	14.5	M8	80	-	-	47
NSA43-4A-2Z	174	185	39.5	14.5	M8	80	-	-	47
NSA43-4B-2RS	174	185	39.5	14.5	M8	80	-	-	47
NSA43-4B-2Z	174	185	39.5	14.5	M8	80	-	-	47
NSA43-5-2RS	210	221	39.5	14.5	M8	40	-	-	45
NSA43-5-2Z	210	221	39.5	14.5	M8	40	-	-	45
NSA43-6A-2RS	249	260	39.5	14.5	M8	80	-	-	44.5
NSA43-6A-2Z	249	260	39.5	14.5	M8	80	-	-	44.5
NSA43-6B-2RS	249	260	39.5	14.5	M8	80	-	-	44.5
NSA43-6B-2Z	249	260	39.5	14.5	M8	80	-	-	44.5
NSW63-3-2ZR	195	206	60	20.2	M8	54	34	168	16.5
NSW63-4A-2ZR	250	261	60	20.2	M8	54	-	-	17
NSW63-4B-2ZR	250	261	60	20.2	M8	54	-	-	17
NSW63-5-2ZR	305	316	60	20.2	M8	54	-	-	17.5
NSW63-6A-2ZR	360	371	60	20.2	M8	54	-	-	18
NSW63-6B-2ZR	360	371	60	20.2	M8	54	-	-	18
NSA63-3-2ZR	195	206	60	20.2	M8	54	34	168	16.5
NSA63-4A-2ZR	250	261	60	20.2	M8	54	-	-	17
NSA63-4B-2ZR	250	261	60	20.2	M8	54	-	-	17
NSA63-5-2ZR	305	316	60	20.2	M8	54	-	-	17.5
NSA63-6A-2ZR	360	371	60	20.2	M8	54	-	-	18
NSA63-6B-2ZR	360	371	60	20.2	M8	54	-	-	18

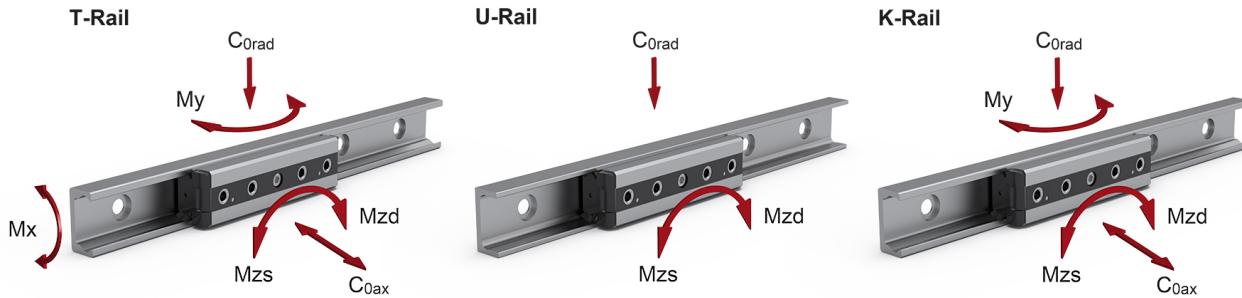
Dimensions

Designation	S1	S2
NSW18-3-2RS	9	-
NSW18-3-2Z	9	-
NSW18-4A-2RS	-	-
NSW18-4A-2Z	-	-
NSW18-4B-2RS	-	-
NSW18-4B-2Z	-	-
NSW18-5-2RS	-	-
NSW18-5-2Z	-	-
NSW18-6A-2RS	-	-
NSW18-6A-2Z	-	-
NSW18-6B-2RS	-	-
NSW18-6B-2Z	-	-
NSW28-3-2RS	9.5	-
NSW28-3-2Z	9.5	-
NSW28-4A-2RS	-	-
NSW28-4A-2Z	-	-
NSW28-4B-2RS	-	-
NSW28-4B-2Z	-	-
NSW28-5-2RS	-	-
NSW28-5-2Z	-	-
NSW28-6A-2RS	-	-
NSW28-6A-2Z	-	-
NSW28-6B-2RS	-	-
NSW28-6B-2Z	-	-
NSW43-3-2RS	12.5	-
NSW43-3-2Z	12.5	-
NSW43-4A-2RS	-	-
NSW43-4A-2Z	-	-
NSW43-4B-2RS	-	-
NSW43-4B-2Z	-	-
NSW43-5-2RS	-	-
NSW43-5-2Z	-	-
NSW43-6A-2RS	-	-
NSW43-6A-2Z	-	-
NSW43-6B-2RS	-	-
NSW43-6B-2Z	-	-
NSA43-3-2RS	12.5	-
NSA43-3-2Z	12.5	-
NSA43-4A-2RS	-	-
NSA43-4A-2Z	-	-
NSA43-4B-2RS	-	-
NSA43-4B-2Z	-	-

Dimensions

Designation	S1	S2
NSA43-5-2RS	-	-
NSA43-5-2Z	-	-
NSA43-6A-2RS	-	-
NSA43-6A-2Z	-	-
NSA43-6B-2RS	-	-
NSA43-6B-2Z	-	-
NSW63-3-2ZR	-	13.5
NSW63-4A-2ZR	-	-
NSW63-4B-2ZR	-	-
NSW63-5-2ZR	-	-
NSW63-6A-2ZR	-	-
NSW63-6B-2ZR	-	-
NSA63-3-2ZR	-	13.5
NSA63-4A-2ZR	-	-
NSA63-4B-2ZR	-	-
NSA63-5-2ZR	-	-
NSA63-6A-2ZR	-	-
NSA63-6B-2ZR	-	-

Load & Weight



The load capacities in the following tables each apply for one slider. When using the slider in U-rails (floating bearing rails) the values are $C_{0ax} = 0$, $M_x = 0$ and $M_y = 0$. When using the sliders in K-rails (compensation rails) the value is: $M_x = 0$.

Designation	C (N)	C0rad (N)	C0ax (N)	Mx (Nm)	My (Nm)
NSW18-3-2RS	1530	820	260	1.5	4.7
NSW18-3-2Z	1530	820	260	1.5	4.7
NSW18-4A-2RS	1530	820	300	2.8	7
NSW18-4A-2Z	1530	820	300	2.8	7
NSW18-4B-2RS	1530	820	300	2.8	7
NSW18-4B-2Z	1530	820	300	2.8	7
NSW18-5-2RS	1830	975	360	2.8	9.4
NSW18-5-2Z	1830	975	360	2.8	9.4
NSW18-6A-2RS	1830	975	440	3.3	11.8
NSW18-6A-2Z	1830	975	440	3.3	11.8
NSW18-6B-2RS	1830	975	440	3.3	11.8
NSW18-6B-2Z	1830	975	440	3.3	11.8
NSW28-3-2RS	4260	2170	640	6.2	16
NSW28-3-2Z	4260	2170	640	6.2	16
NSW28-4A-2RS	4260	2170	750	11.5	21.7
NSW28-4A-2Z	4260	2170	750	11.5	21.7
NSW28-4B-2RS	4260	2170	750	11.5	21.7
NSW28-4B-2Z	4260	2170	750	11.5	21.7
NSW28-5-2RS	5065	2580	900	11.5	29
NSW28-5-2Z	5065	2580	900	11.5	29
NSW28-6A-2RS	5065	2580	1070	13.7	36.2
NSW28-6A-2Z	5065	2580	1070	13.7	36.2
NSW28-6B-2RS	5065	2580	1070	13.7	36.2
NSW28-6B-2Z	5065	2580	1070	13.7	36.2
NSW43-3-2RS	12280	5500	1570	23.6	60
NSW43-3-2Z	12280	5500	1570	23.6	60
NSW43-4A-2RS	12280	5500	1855	43.6	81.5
NSW43-4A-2Z	12280	5500	1855	43.6	81.5
NSW43-4B-2RS	12280	5500	1855	43.6	81.5
NSW43-4B-2Z	12280	5500	1855	43.6	81.5
NSW43-5-2RS	14675	6540	2215	43.6	108.6
NSW43-5-2Z	14675	6540	2215	43.6	108.6

Load & Weight

Designation	C (N)	C0rad (N)	C0ax (N)	Mx (Nm)	My (Nm)
NSW43-6A-2RS	14675	6540	2645	52	135.8
NSW43-6A-2Z	14675	6540	2645	52	135.8
NSW43-6B-2RS	14675	6540	2645	52	135.8
NSW43-6B-2Z	14675	6540	2645	52	135.8
NSA43-3-2RS	12280	5100	1320	0	50.4
NSA43-3-2Z	12280	5100	1320	0	50.4
NSA43-4A-2RS	12280	5100	1320	0	54.3
NSA43-4A-2Z	12280	5100	1320	0	54.3
NSA43-4B-2RS	12280	5100	1320	0	54.3
NSA43-4B-2Z	12280	5100	1320	0	54.3
NSA43-5-2RS	14675	6065	1570	0	108.7
NSA43-5-2Z	14675	6065	1570	0	108.7
NSA43-6A-2RS	14675	6065	1570	0	108.7
NSA43-6A-2Z	14675	6065	1570	0	108.7
NSA43-6B-2RS	14675	6065	1570	0	108.7
NSA43-6B-2Z	14675	6065	1570	0	108.7
NSW63-3-2ZR	30750	12500	6000	125	271
NSW63-4A-2ZR	30750	12500	7200	250	413
NSW63-4B-2ZR	30750	12500	7200	250	413
NSW63-5-2ZR	36600	15000	8500	250	511
NSW63-6A-2ZR	36600	15000	10000	350	689
NSW63-6B-2ZR	36600	15000	10000	350	689
NSA63-3-2ZR	30750	11550	5045	0	235
NSA63-4A-2ZR	30750	11550	5045	0	294
NSA63-4B-2ZR	30750	11550	5045	0	294
NSA63-5-2ZR	36600	13745	6000	0	589
NSA63-6A-2ZR	36600	13745	6000	0	589
NSA63-6B-2ZR	36600	13745	6000	0	589

Designation	Mzd (Nm)	Mzs (Nm)	Weight (kg)
NSW18-3-2RS	8.2	8.2	0.096
NSW18-3-2Z	8.2	8.2	0.096
NSW18-4A-2RS	8.2	24.7	0.096
NSW18-4A-2Z	8.2	24.7	0.096
NSW18-4B-2RS	24.7	8.2	0.11
NSW18-4B-2Z	24.7	8.2	0.11
NSW18-5-2RS	24.7	24.7	0.11
NSW18-5-2Z	24.7	24.7	0.11
NSW18-6A-2RS	24.7	41.1	0.138
NSW18-6A-2Z	24.7	41.1	0.138
NSW18-6B-2RS	41.1	24.7	0.138
NSW18-6B-2Z	41.1	24.7	0.138

Load & Weight

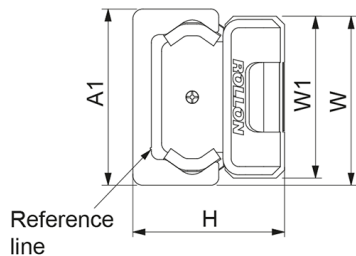
Designation	Mzd (Nm)	Mzs (Nm)	Weight (kg)
NSW28-3-2RS	27.2	27.2	0.23
NSW28-3-2Z	27.2	27.2	0.23
NSW28-4A-2RS	27.2	81.7	0.29
NSW28-4A-2Z	27.2	81.7	0.29
NSW28-4B-2RS	81.7	27.2	0.29
NSW28-4B-2Z	81.7	27.2	0.29
NSW28-5-2RS	81.7	81.7	0.35
NSW28-5-2Z	81.7	81.7	0.35
NSW28-6A-2RS	81.7	136.1	0.42
NSW28-6A-2Z	81.7	136.1	0.42
NSW28-6B-2RS	136.1	81.7	0.42
NSW28-6B-2Z	136.1	81.7	0.42
NSW43-3-2RS	104.5	104.5	0.8
NSW43-3-2Z	104.5	104.5	0.8
NSW43-4A-2RS	104.5	313.5	1.02
NSW43-4A-2Z	104.5	313.5	1.02
NSW43-4B-2RS	313.5	104.5	1.02
NSW43-4B-2Z	313.5	104.5	1.02
NSW43-5-2RS	313.5	313.5	1.24
NSW43-5-2Z	313.5	313.5	1.24
NSW43-6A-2RS	313.5	522.5	1.47
NSW43-6A-2Z	313.5	522.5	1.47
NSW43-6B-2RS	522.5	313.5	1.47
NSW43-6B-2Z	522.5	313.5	1.47
NSA43-3-2RS	96.9	96.9	0.8
NSA43-3-2Z	96.9	96.9	0.8
NSA43-4A-2RS	96.9	290.7	1.02
NSA43-4A-2Z	96.9	290.7	1.02
NSA43-4B-2RS	290.7	96.9	1.02
NSA43-4B-2Z	290.7	96.9	1.02
NSA43-5-2RS	290.7	290.7	1.24
NSA43-5-2Z	290.7	290.7	1.24
NSA43-6A-2RS	290.7	484.5	1.47
NSA43-6A-2Z	290.7	484.5	1.47
NSA43-6B-2RS	484.5	290.7	1.47
NSA43-6B-2Z	484.5	290.7	1.47
NSW63-3-2ZR	367	367	2.44
NSW63-4A-2ZR	367	1100	3.17
NSW63-4B-2ZR	1100	367	3.17
NSW63-5-2ZR	1100	1100	3.89
NSW63-6A-2ZR	1100	1830	4.60
NSW63-6B-2ZR	1830	1100	4.60

Load & Weight

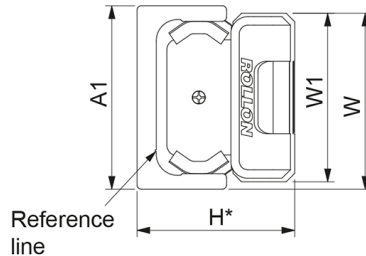
Designation	Mzd (Nm)	Mzs (Nm)	Weight (kg)
NSA63-3-2ZR	335	335	2.44
NSA63-4A-2ZR	335	935	3.17
NSA63-4B-2ZR	935	335	3.17
NSA63-5-2ZR	935	935	3.89
NSA63-6A-2ZR	935	1560	4.60
NSA63-6B-2ZR	1560	935	4.60

Rail/Slider Combination

T-rail with NSW slider

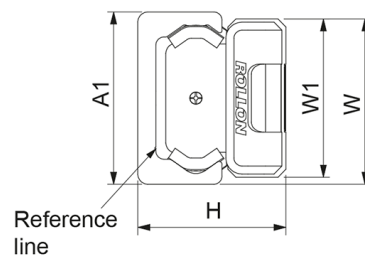


U-rail with NSW slider



* Nom. value

K-rail with NSA slider



The K-rail enables the slider to twist around its longitudinal axis.

Designation	A1	H (Slider+T-rail)	H (Slider+U-rail)	H (Slider+K-rail)	W1
NSW18-3-2RS	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-3-2Z	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-4A-2RS	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-4A-2Z	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-4B-2RS	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-4B-2Z	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-5-2RS	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-5-2Z	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-6A-2RS	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-6A-2Z	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-6B-2RS	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW18-6B-2Z	18 (+0.25/-0.10)	16.5 (±0.15)	16,5*	n/a	16 (0/-0.2)
NSW28-3-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-3-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-4A-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-4A-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-4B-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-4B-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-5-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-5-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-6A-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-6A-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-6B-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW28-6B-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	24.9 (0/-0.2)
NSW43-3-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-3-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-4A-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-4A-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-4B-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-4B-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-5-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)

Rail/Slider Combination

Designation	A1	H (Slider+T-rail)	H (Slider+U-rail)	H (Slider+K-rail)	W1
NSW43-5-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-6A-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-6A-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-6B-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSW43-6B-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	39.5 (0/-0.2)
NSA43-3-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-3-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-4A-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-4A-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-4B-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-4B-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-5-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-5-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-6A-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-6A-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-6B-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSA43-6B-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	39.5 (0/-0.2)
NSW63-3-2ZR	63 (+0.35/-0.10)	50.5 (±0.15)	50.5*	n/a	60 (0/-0.2)
NSW63-4A-2ZR	63 (+0.35/-0.10)	50.5 (±0.15)	50.5*	n/a	60 (0/-0.2)
NSW63-4B-2ZR	63 (+0.35/-0.10)	50.5 (±0.15)	50.5*	n/a	60 (0/-0.2)
NSW63-5-2ZR	63 (+0.35/-0.10)	50.5 (±0.15)	50.5*	n/a	60 (0/-0.2)
NSW63-6A-2ZR	63 (+0.35/-0.10)	50.5 (±0.15)	50.5*	n/a	60 (0/-0.2)
NSW63-6B-2ZR	63 (+0.35/-0.10)	50.5 (±0.15)	50.5*	n/a	60 (0/-0.2)
NSA63-3-2ZR	63 (+0.35/-0.10)	n/a	n/a	50.5 (±0.15)	60 (0/-0.2)
NSA63-4A-2ZR	63 (+0.35/-0.10)	n/a	n/a	50.5 (±0.15)	60 (0/-0.2)
NSA63-4B-2ZR	63 (+0.35/-0.10)	n/a	n/a	50.5 (±0.15)	60 (0/-0.2)
NSA63-5-2ZR	63 (+0.35/-0.10)	n/a	n/a	50.5 (±0.15)	60 (0/-0.2)
NSA63-6A-2ZR	63 (+0.35/-0.10)	n/a	n/a	50.5 (±0.15)	60 (0/-0.2)
NSA63-6B-2ZR	63 (+0.35/-0.10)	n/a	n/a	50.5 (±0.15)	60 (0/-0.2)

Designation	W
NSW18-3-2RS	17 (+0.1/-0.3)
NSW18-3-2Z	17 (+0.1/-0.3)
NSW18-4A-2RS	17 (+0.1/-0.3)
NSW18-4A-2Z	17 (+0.1/-0.3)
NSW18-4B-2RS	17 (+0.1/-0.3)
NSW18-4B-2Z	17 (+0.1/-0.3)
NSW18-5-2RS	17 (+0.1/-0.3)
NSW18-5-2Z	17 (+0.1/-0.3)
NSW18-6A-2RS	17 (+0.1/-0.3)
NSW18-6A-2Z	17 (+0.1/-0.3)
NSW18-6B-2RS	17 (+0.1/-0.3)

Rail/Slider Combination

Designation	W
NSW18-6B-2Z	17 (+0.1/-0.3)
NSW28-3-2RS	26.45 (+0.1/-0.3)
NSW28-3-2Z	26.45 (+0.1/-0.3)
NSW28-4A-2RS	26.45 (+0.1/-0.3)
NSW28-4A-2Z	26.45 (+0.1/-0.3)
NSW28-4B-2RS	26.45 (+0.1/-0.3)
NSW28-4B-2Z	26.45 (+0.1/-0.3)
NSW28-5-2RS	26.45 (+0.1/-0.3)
NSW28-5-2Z	26.45 (+0.1/-0.3)
NSW28-6A-2RS	26.45 (+0.1/-0.3)
NSW28-6A-2Z	26.45 (+0.1/-0.3)
NSW28-6B-2RS	26.45 (+0.1/-0.3)
NSW28-6B-2Z	26.45 (+0.1/-0.3)
NSW43-3-2RS	41.25 (+0.2/-0.4)
NSW43-3-2Z	41.25 (+0.2/-0.4)
NSW43-4A-2RS	41.25 (+0.2/-0.4)
NSW43-4A-2Z	41.25 (+0.2/-0.4)
NSW43-4B-2RS	41.25 (+0.2/-0.4)
NSW43-4B-2Z	41.25 (+0.2/-0.4)
NSW43-5-2RS	41.25 (+0.2/-0.4)
NSW43-5-2Z	41.25 (+0.2/-0.4)
NSW43-6A-2RS	41.25 (+0.2/-0.4)
NSW43-6A-2Z	41.25 (+0.2/-0.4)
NSW43-6B-2RS	41.25 (+0.2/-0.4)
NSW43-6B-2Z	41.25 (+0.2/-0.4)
NSA43-3-2RS	41.25 (+0.2/-0.4)
NSA43-3-2Z	41.25 (+0.2/-0.4)
NSA43-4A-2RS	41.25 (+0.2/-0.4)
NSA43-4A-2Z	41.25 (+0.2/-0.4)
NSA43-4B-2RS	41.25 (+0.2/-0.4)
NSA43-4B-2Z	41.25 (+0.2/-0.4)
NSA43-5-2RS	41.25 (+0.2/-0.4)
NSA43-5-2Z	41.25 (+0.2/-0.4)
NSA43-6A-2RS	41.25 (+0.2/-0.4)
NSA43-6A-2Z	41.25 (+0.2/-0.4)
NSA43-6B-2RS	41.25 (+0.2/-0.4)
NSA43-6B-2Z	41.25 (+0.2/-0.4)
NSW63-3-2ZR	61.5 (+0.2/-0.4)
NSW63-4A-2ZR	61.5 (+0.2/-0.4)
NSW63-4B-2ZR	61.5 (+0.2/-0.4)
NSW63-5-2ZR	61.5 (+0.2/-0.4)
NSW63-6A-2ZR	61.5 (+0.2/-0.4)

Rail/Slider Combination

Designation	W
NSW63-6B-2ZR	61.5 (+0.2/-0.4)
NSA63-3-2ZR	61.5 (+0.2/-0.4)
NSA63-4A-2ZR	61.5 (+0.2/-0.4)
NSA63-4B-2ZR	61.5 (+0.2/-0.4)
NSA63-5-2ZR	61.5 (+0.2/-0.4)
NSA63-6A-2ZR	61.5 (+0.2/-0.4)
NSA63-6B-2ZR	61.5 (+0.2/-0.4)

Slider NSD/NSDA

Constructed as the NSW/NSA-slider with mounting holes parallel to the direction of preferred loading. It is available for sizes 28 and 43, with three or five rollers, depending on load case and load direction set with the corresponding configuration.

Standard sliders are supplied with rollers with 2Z steel disc seals. For dusty environment and splash-proof applications, 2RS rubber seal rollers are available.

All NSDA-sliders, which are made for rail type K, have rollers with circular cross profile. The main load direction should always be on the largest number of the slider-wheels and those wheels should always run on the V-shaped raceway of the K-Rail. So for a typical slider with 3 wheels, the two outer wheels should carry the majority of the load and run in the V-shape and the third (middle) wheel should run on the flat raceway in the K-Rail.

All NSD/NSDA sliders have wipers assembled and the wipers for K-Rails are adapted to work on the two different raceway shapes.

Dimensions in mm.

Material: DIN 11SMnPb28. Zinc-plated according to ISO 2081.

Max. Radial Load Capacity (N): 15,000 (per slider)

Temperature range (°C): -20 to +120



General Data

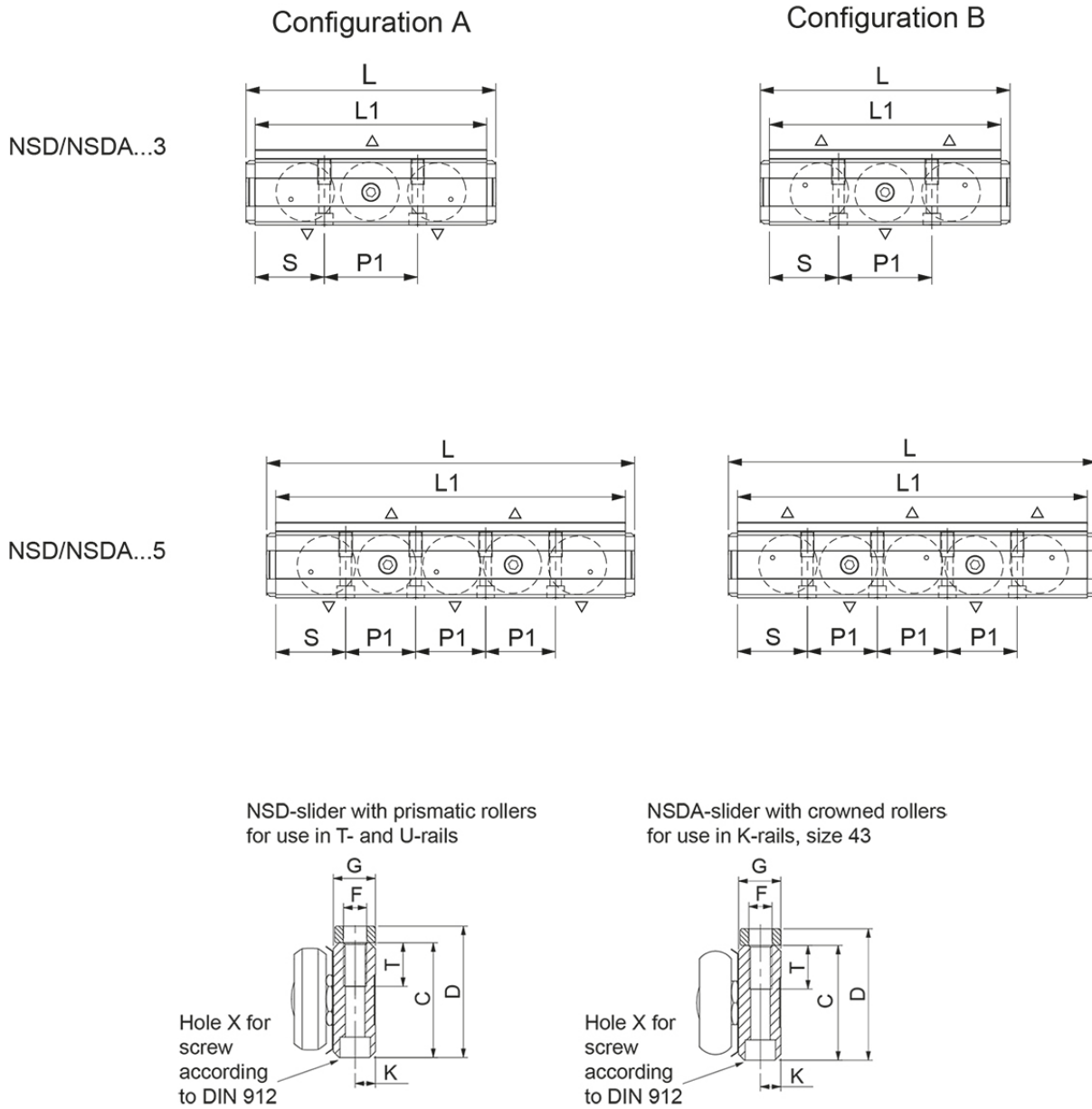
Designation	Size	Max. Speed (m/s)	Max. Acceleration (m/s)	Roller type	Number of rollers
NSD28-3A-2RS	28	3	10	CPA28	3
NSD28-3A-2Z	28	3	10	CPA28	3
NSD28-3B-2RS	28	3	10	CPA28	3
NSD28-3B-2Z	28	3	10	CPA28	3
NSD28-5A-2RS	28	3	10	CPA28	5
NSD28-5A-2Z	28	3	10	CPA28	5
NSD28-5B-2RS	28	3	10	CPA28	5
NSD28-5B-2Z	28	3	10	CPA28	5
NSD43-3A-2RS	43	7	15	CPA43	3
NSD43-3A-2Z	43	7	15	CPA43	3
NSD43-3B-2RS	43	7	15	CPA43	3
NSD43-3B-2Z	43	7	15	CPA43	3
NSD43-5A-2RS	43	7	15	CPA43	5
NSD43-5A-2Z	43	7	15	CPA43	5
NSD43-5B-2RS	43	7	15	CPA43	5
NSD43-5B-2Z	43	7	15	CPA43	5
NSDA43-3A-2RS	43	7	15	CRPA43	3
NSDA43-3A-2Z	43	7	15	CRPA43	3
NSDA43-3B-2RS	43	7	15	CRPA43	3
NSDA43-3B-2Z	43	7	15	CRPA43	3
NSDA43-5A-2RS	43	7	15	CRPA43	5
NSDA43-5A-2Z	43	7	15	CRPA43	5
NSDA43-5B-2RS	43	7	15	CRPA43	5
NSDA43-5B-2Z	43	7	15	CRPA43	5

Designation	Number of Fixing Holes
NSD28-3A-2RS	2
NSD28-3A-2Z	2
NSD28-3B-2RS	2
NSD28-3B-2Z	2
NSD28-5A-2RS	4
NSD28-5A-2Z	4
NSD28-5B-2RS	4
NSD28-5B-2Z	4
NSD43-3A-2RS	2
NSD43-3A-2Z	2
NSD43-3B-2RS	2
NSD43-3B-2Z	2
NSD43-5A-2RS	4
NSD43-5A-2Z	4

General Data

Designation	Number of Fixing Holes
NSD43-5B-2RS	4
NSD43-5B-2Z	4
NSDA43-3A-2RS	2
NSDA43-3A-2Z	2
NSDA43-3B-2RS	2
NSDA43-3B-2Z	2
NSDA43-5A-2RS	4
NSDA43-5A-2Z	4
NSDA43-5B-2RS	4
NSDA43-5B-2Z	4

Dimensions



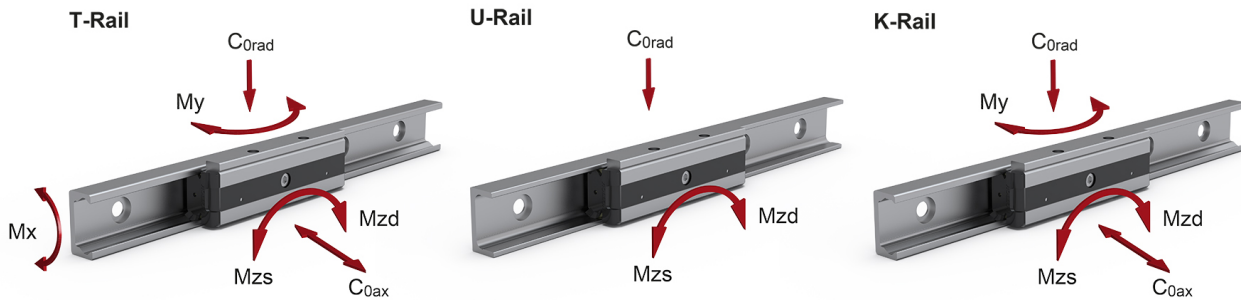
Designation	L1	L	C	D	G	F	K	P1	S
NSD28-3A-2RS	97	108	24.9	30.45	9.7	M6	4.7	36	30.5
NSD28-3A-2Z	97	108	24.9	30.45	9.7	M6	4.7	36	30.5
NSD28-3B-2RS	97	108	24.9	30.45	9.7	M6	4.7	36	30.5
NSD28-3B-2Z	97	108	24.9	30.45	9.7	M6	4.7	36	30.5
NSD28-5A-2RS	142	153	24.9	30.45	9.7	M6	4.7	27	30.5
NSD28-5A-2Z	142	153	24.9	30.45	9.7	M6	4.7	27	30.5
NSD28-5B-2RS	142	153	24.9	30.45	9.7	M6	4.7	27	30.5
NSD28-5B-2Z	142	153	24.9	30.45	9.7	M6	4.7	27	30.5
NSD43-3A-2RS	139	150	39.5	45.25	14.5	M8	7	56	41.5

Dimensions

Designation	L1	L	C	D	G	F	K	P1	S
NSD43-3A-2Z	139	150	39.5	45.25	14.5	M8	7	56	41.5
NSD43-3B-2RS	139	150	39.5	45.25	14.5	M8	7	56	41.5
NSD43-3B-2Z	139	150	39.5	45.25	14.5	M8	7	56	41.5
NSD43-5A-2RS	210	221	39.5	45.25	14.5	M8	7	42	42
NSD43-5A-2Z	210	221	39.5	45.25	14.5	M8	7	42	42
NSD43-5B-2RS	210	221	39.5	45.25	14.5	M8	7	42	42
NSD43-5B-2Z	210	221	39.5	45.25	14.5	M8	7	42	42
NSDA43-3A-2RS	139	150	39.5	45.25	14.5	M8	7	56	41.5
NSDA43-3A-2Z	139	150	39.5	45.25	14.5	M8	7	56	41.5
NSDA43-3B-2RS	139	150	39.5	45.25	14.5	M8	7	56	41.5
NSDA43-3B-2Z	139	150	39.5	45.25	14.5	M8	7	56	41.5
NSDA43-5A-2RS	210	221	39.5	45.25	14.5	M8	7	42	42
NSDA43-5A-2Z	210	221	39.5	45.25	14.5	M8	7	42	42
NSDA43-5B-2RS	210	221	39.5	45.25	14.5	M8	7	42	42
NSDA43-5B-2Z	210	221	39.5	45.25	14.5	M8	7	42	42

Designation	T	X
NSD28-3A-2RS	15	M5
NSD28-3A-2Z	15	M5
NSD28-3B-2RS	15	M5
NSD28-3B-2Z	15	M5
NSD28-5A-2RS	15	M5
NSD28-5A-2Z	15	M5
NSD28-5B-2RS	15	M5
NSD28-5B-2Z	15	M5
NSD43-3A-2RS	15	M6
NSD43-3A-2Z	15	M6
NSD43-3B-2RS	15	M6
NSD43-3B-2Z	15	M6
NSD43-5A-2RS	15	M6
NSD43-5A-2Z	15	M6
NSD43-5B-2RS	15	M6
NSD43-5B-2Z	15	M6
NSDA43-3A-2RS	15	M6
NSDA43-3A-2Z	15	M6
NSDA43-3B-2RS	15	M6
NSDA43-3B-2Z	15	M6
NSDA43-5A-2RS	15	M6
NSDA43-5A-2Z	15	M6
NSDA43-5B-2RS	15	M6
NSDA43-5B-2Z	15	M6

Load & Weight



The load capacities in the following tables each apply for one slider. When using the slider in U-rails (floating bearing rails) the values are $C_{0ax} = 0$, $M_x = 0$ and $M_y = 0$. When using the sliders in K-rails (compensation rails) the value is: $M_x = 0$.

Designation	C (N)	C _{0rad} (N)	C _{0ax} (N)	M _x (Nm)	M _y (Nm)
NSD28-3A-2RS	4260	2170	640	6.2	16
NSD28-3A-2Z	4260	2170	640	6.2	16
NSD28-3B-2RS	4260	2170	640	6.2	16
NSD28-3B-2Z	4260	2170	640	6.2	16
NSD28-5A-2RS	5065	2580	900	11.5	29
NSD28-5A-2Z	5065	2580	900	11.5	29
NSD28-5B-2RS	5065	2580	900	11.5	29
NSD28-5B-2Z	5065	2580	900	11.5	29
NSD43-3A-2RS	12280	5500	1570	23.6	60
NSD43-3A-2Z	12280	5500	1570	23.6	60
NSD43-3B-2RS	12280	5500	1570	23.6	60
NSD43-3B-2Z	12280	5500	1570	23.6	60
NSD43-5A-2RS	14675	9540	2215	43.6	108.6
NSD43-5A-2Z	14675	9540	2215	43.6	108.6
NSD43-5B-2RS	14675	9540	2215	43.6	108.6
NSD43-5B-2Z	14675	9540	2215	43.6	108.6
NSDA43-3A-2RS	12280	5100	1320	0	50.4
NSDA43-3A-2Z	12280	5100	1320	0	50.4
NSDA43-3B-2RS	12280	5100	1320	0	50.4
NSDA43-3B-2Z	12280	5100	1320	0	50.4
NSDA43-5A-2RS	14675	6065	1570	0	108.7
NSDA43-5A-2Z	14675	6065	1570	0	108.7
NSDA43-5B-2RS	14675	6065	1570	0	108.7
NSDA43-5B-2Z	14675	6065	1570	0	108.7

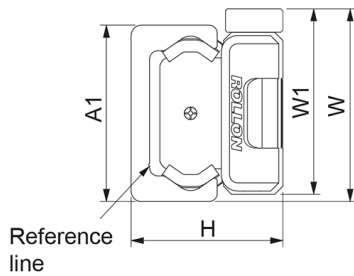
Designation	M _{zd} (Nm)	M _{zs} (Nm)	Weight (kg)
NSD28-3A-2RS	27.2	27.2	0.23
NSD28-3A-2Z	27.2	27.2	0.23
NSD28-3B-2RS	27.2	27.2	0.23
NSD28-3B-2Z	27.2	27.2	0.23
NSD28-5A-2RS	81.7	81.7	0.35
NSD28-5A-2Z	81.7	81.7	0.35

Load & Weight

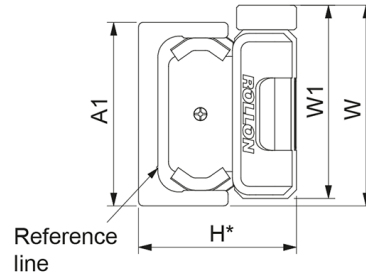
Designation	Mzd (Nm)	Mzs (Nm)	Weight (kg)
NSD28-5B-2RS	81.7	81.7	0.35
NSD28-5B-2Z	81.7	81.7	0.35
NSD43-3A-2RS	104.5	104.5	0.8
NSD43-3A-2Z	104.5	104.5	0.8
NSD43-3B-2RS	104.5	104.5	0.8
NSD43-3B-2Z	104.5	104.5	0.8
NSD43-5A-2RS	313.5	313.5	1.24
NSD43-5A-2Z	313.5	313.5	1.24
NSD43-5B-2RS	313.5	313.5	1.24
NSD43-5B-2Z	313.5	313.5	1.24
NSDA43-3A-2RS	96.9	96.9	0.8
NSDA43-3A-2Z	96.9	96.9	0.8
NSDA43-3B-2RS	96.9	96.9	0.8
NSDA43-3B-2Z	96.9	96.9	0.8
NSDA43-5A-2RS	290.7	290.7	1.24
NSDA43-5A-2Z	290.7	290.7	1.24
NSDA43-5B-2RS	290.7	290.7	1.24
NSDA43-5B-2Z	290.7	290.7	1.24

Rail/Slider Combination

T-rail with NSD slider

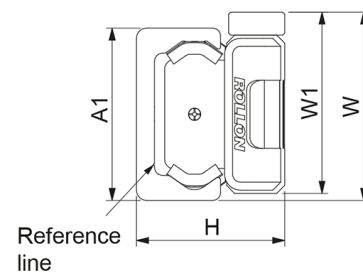


U-rail with NSD slider



* Nom. value

K-rail with NSDA slider



The K-rail enables the slider to twist around its longitudinal axis.

Designation	A1	H (Slider+T-rail)	H (Slider+U-rail)	H (Slider+K-rail)	W1
NSD28-3A-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD28-3A-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD28-3B-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD28-3B-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD28-5A-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD28-5A-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD28-5B-2RS	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD28-5B-2Z	28 (+0.25/-0.10)	23.9 (±0.15)	23.9*	n/a	30.45 (0/-0.2)
NSD43-3A-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSD43-3A-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSD43-3B-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSD43-3B-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSD43-5A-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSD43-5A-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSD43-5B-2RS	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSD43-5B-2Z	43 (+0.35/-0.10)	37 (±0.15)	37*	n/a	45.25 (0/-0.2)
NSDA43-3A-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)
NSDA43-3A-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)
NSDA43-3B-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)
NSDA43-3B-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)
NSDA43-5A-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)
NSDA43-5A-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)
NSDA43-5B-2RS	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)
NSDA43-5B-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (±0.15)	45.25 (0/-0.2)

Designation	W
NSD28-3A-2RS	32 (+0.1/-0.3)
NSD28-3A-2Z	32 (+0.1/-0.3)
NSD28-3B-2RS	32 (+0.1/-0.3)
NSD28-3B-2Z	32 (+0.1/-0.3)
NSD28-5A-2RS	32 (+0.1/-0.3)

Rail/Slider Combination

Designation	W
NSD28-5A-2Z	32 (+0.1/-0.3)
NSD28-5B-2RS	32 (+0.1/-0.3)
NSD28-5B-2Z	32 (+0.1/-0.3)
NSD43-3A-2RS	47 (+0.2/-0.4)
NSD43-3A-2Z	47 (+0.2/-0.4)
NSD43-3B-2RS	47 (+0.2/-0.4)
NSD43-3B-2Z	47 (+0.2/-0.4)
NSD43-5A-2RS	47 (+0.2/-0.4)
NSD43-5A-2Z	47 (+0.2/-0.4)
NSD43-5B-2RS	47 (+0.2/-0.4)
NSD43-5B-2Z	47 (+0.2/-0.4)
NSDA43-3A-2RS	47 (+0.2/-0.4)
NSDA43-3A-2Z	47 (+0.2/-0.4)
NSDA43-3B-2RS	47 (+0.2/-0.4)
NSDA43-3B-2Z	47 (+0.2/-0.4)
NSDA43-5A-2RS	47 (+0.2/-0.4)
NSDA43-5A-2Z	47 (+0.2/-0.4)
NSDA43-5B-2RS	47 (+0.2/-0.4)
NSDA43-5B-2Z	47 (+0.2/-0.4)

Slider CSW/CSWK

Constructed with zinc-plated steel body and sturdy wipers made of polyamide. Available for all sizes. Depending on the load requirement, slider is configurable with up to six rollers.

Standard sliders are supplied with rollers with 2Z steel disc seals. For dusty environment and splash-proof applications, 2RS rubber seal rollers are available.

The CSWK-sliders, which are made for rail type K, have rollers with circular cross profile. The main load direction should always be on the largest number of the slider-wheels and those wheels should always run on the V-shaped raceway of the K-Rail. So for a typical slider with 3 wheels, the two outer wheels should carry the majority of the load and run in the V-shape and the third (middle) wheel should run on the flat raceway in the K-Rail.

For CSW/CSWK-sliders, the wipers are delivered un-assembled and need to be correctly oriented and assembled. For wipers for K-rails it is especially important that the wipers are laterally adjusted to the rail. In cases when a complete system of rail + slider(s) is ordered, wipers are already assembled, oriented, and adjusted to the rail.

Dimensions in mm.

Material: DIN 11SMnPb28. Zinc-plated according to ISO 2081.

Max. Radial Load Capacity (N): 15,000 (per slider)

Temperature range (°C): -20 to +120



General Data

Designation	Size	Max. Speed (m/s)	Max. Acceleration (m/s)	Roller type	Number of rollers
CSW18-60-2RS-T	18	3	10	CPA18-CPN18	3
CSW18-60-2RS-U	18	3	10	CPA18-CPN18	3
CSW18-60-2Z-T	18	3	10	CPA18-CPN18	3
CSW18-60-2Z-U	18	3	10	CPA18-CPN18	3
CSW18-80-2RS-A-T	18	3	10	CPA18	4
CSW18-80-2RS-A-U	18	3	10	CPA18	4
CSW18-80-2Z-A-T	18	3	10	CPA18	4
CSW18-80-2Z-A-U	18	3	10	CPA18	4
CSW18-80-2RS-B-T	18	3	10	CPA18	4
CSW18-80-2RS-B-U	18	3	10	CPA18	4
CSW18-80-2Z-B-T	18	3	10	CPA18	4
CSW18-80-2Z-B-U	18	3	10	CPA18	4
CSW18-100-2RS-T	18	3	10	CPA18	5
CSW18-100-2RS-U	18	3	10	CPA18	5
CSW18-100-2Z-T	18	3	10	CPA18	5
CSW18-100-2Z-U	18	3	10	CPA18	5
CSW18-120-2RS-A-T	18	3	10	CPA18	6
CSW18-120-2RS-A-U	18	3	10	CPA18	6
CSW18-120-2Z-A-T	18	3	10	CPA18	6
CSW18-120-2Z-A-U	18	3	10	CPA18	6
CSW18-120-2RS-B-T	18	3	10	CPA18	6
CSW18-120-2RS-B-U	18	3	10	CPA18	6
CSW18-120-2Z-B-T	18	3	10	CPA18	6
CSW18-120-2Z-B-U	18	3	10	CPA18	6
CSW28-80-2RS-T	28	5	15	CPA28-CPN28	3
CSW28-80-2RS-U	28	5	15	CPA28-CPN28	3
CSW28-80-2Z-T	28	5	15	CPA28-CPN28	3
CSW28-80-2Z-U	28	5	15	CPA28-CPN28	3
CSW28-100-2RS-A-T	28	5	15	CPA28	4
CSW28-100-2RS-A-U	28	5	15	CPA28	4
CSW28-100-2Z-A-T	28	5	15	CPA28	4
CSW28-100-2Z-A-U	28	5	15	CPA28	4
CSW28-100-2RS-B-T	28	5	15	CPA28	4
CSW28-100-2RS-B-U	28	5	15	CPA28	4
CSW28-100-2Z-B-T	28	5	15	CPA28	4
CSW28-100-2Z-B-U	28	5	15	CPA28	4
CSW28-125-2RS-T	28	5	15	CPA28	5
CSW28-125-2RS-U	28	5	15	CPA28	5
CSW28-125-2Z-T	28	5	15	CPA28	5
CSW28-125-2Z-U	28	5	15	CPA28	5

General Data

Designation	Size	Max. Speed (m/s)	Max. Acceleration (m/s)	Roller type	Number of rollers
CSW28-150-2RS-A-T	28	5	15	CPA28	6
CSW28-150-2RS-A-U	28	5	15	CPA28	6
CSW28-150-2Z-A-T	28	5	15	CPA28	6
CSW28-150-2Z-A-U	28	5	15	CPA28	6
CSW28-150-2RS-B-T	28	5	15	CPA28	6
CSW28-150-2RS-B-U	28	5	15	CPA28	6
CSW28-150-2Z-B-T	28	5	15	CPA28	6
CSW28-150-2Z-B-U	28	5	15	CPA28	6
CSW43-120-2RS-T	43	7	15	CPA43-CPN43	3
CSW43-120-2RS-U	43	7	15	CPA43-CPN43	3
CSW43-120-2Z-T	43	7	15	CPA43-CPN43	3
CSW43-120-2Z-U	43	7	15	CPA43-CPN43	3
CSW43-150-2RS-A-T	43	7	15	CPA43	4
CSW43-150-2RS-A-U	43	7	15	CPA43	4
CSW43-150-2Z-A-T	43	7	15	CPA43	4
CSW43-150-2Z-A-U	43	7	15	CPA43	4
CSW43-150-2RS-B-T	43	7	15	CPA43	4
CSW43-150-2RS-B-U	43	7	15	CPA43	4
CSW43-150-2Z-B-T	43	7	15	CPA43	4
CSW43-150-2Z-B-U	43	7	15	CPA43	4
CSW43-190-2RS-T	43	7	15	CPA43	5
CSW43-190-2RS-U	43	7	15	CPA43	5
CSW43-190-2Z-T	43	7	15	CPA43	5
CSW43-190-2Z-U	43	7	15	CPA43	5
CSW43-230-2RS-A-T	43	7	15	CPA43	6
CSW43-230-2RS-A-U	43	7	15	CPA43	6
CSW43-230-2Z-A-T	43	7	15	CPA43	6
CSW43-230-2Z-A-U	43	7	15	CPA43	6
CSW43-230-2RS-B-T	43	7	15	CPA43	6
CSW43-230-2RS-B-U	43	7	15	CPA43	6
CSW43-230-2Z-B-T	43	7	15	CPA43	6
CSW43-230-2Z-B-U	43	7	15	CPA43	6
CSWK43-120-2Z	43	7	15	CRPA43-CRPN43	3
CSWK43-150-2Z-A	43	7	15	CRPA43	4
CSWK43-150-2Z-B	43	7	15	CRPA43	4
CSWK43-190-2Z	43	7	15	CRPA43	5
CSWK43-230-2Z-A	43	7	15	CRPA43	6
CSWK43-230-2Z-B	43	7	15	CRPA43	6
CSW63-180-2ZR-T	63	9	20	CPA63	3
CSW63-180-2ZR-U	63	9	20	CPA63	3
CSW63-235-2ZR-A-T	63	9	20	CPA63	4

General Data

Designation	Size	Max. Speed (m/s)	Max. Acceleration (m/s)	Roller type	Number of rollers
CSW63-235-2ZR-A-U	63	9	20	CPA63	4
CSW63-235-2ZR-B-T	63	9	20	CPA63	4
CSW63-235-2ZR-B-U	63	9	20	CPA63	4
CSW63-290-2ZR-T	63	9	20	CPA63	5
CSW63-290-2ZR-U	63	9	20	CPA63	5
CSW63-345-2ZR-A-T	63	9	20	CPA63	6
CSW63-345-2ZR-A-U	63	9	20	CPA63	6
CSW63-345-2ZR-B-T	63	9	20	CPA63	6
CSW63-345-2ZR-B-U	63	9	20	CPA63	6
CSWK63-180-2ZR	63	9	20	CRPA63	3
CSWK63-235-2ZR-A	63	9	20	CRPA63	4
CSWK63-235-2ZR-B	63	9	20	CRPA63	4
CSWK63-290-2ZR	63	9	20	CRPA63	5
CSWK63-345-2ZR-A	63	9	20	CRPA63	6
CSWK63-345-2ZR-B	63	9	20	CRPA63	6

Designation	Number of Fixing Holes
CSW18-60-2RS-T	2
CSW18-60-2RS-U	2
CSW18-60-2Z-T	2
CSW18-60-2Z-U	2
CSW18-80-2RS-A-T	2
CSW18-80-2RS-A-U	2
CSW18-80-2Z-A-T	2
CSW18-80-2Z-A-U	2
CSW18-80-2RS-B-T	2
CSW18-80-2RS-B-U	2
CSW18-80-2Z-B-T	2
CSW18-80-2Z-B-U	2
CSW18-100-2RS-T	4
CSW18-100-2RS-U	4
CSW18-100-2Z-T	4
CSW18-100-2Z-U	4
CSW18-120-2RS-A-T	3
CSW18-120-2RS-A-U	3
CSW18-120-2Z-A-T	3
CSW18-120-2Z-A-U	3
CSW18-120-2RS-B-T	3
CSW18-120-2RS-B-U	3
CSW18-120-2Z-B-T	3
CSW18-120-2Z-B-U	3

General Data

Designation	Number of Fixing Holes
CSW28-80-2RS-T	2
CSW28-80-2RS-U	2
CSW28-80-2Z-T	2
CSW28-80-2Z-U	2
CSW28-100-2RS-A-T	2
CSW28-100-2RS-A-U	2
CSW28-100-2Z-A-T	2
CSW28-100-2Z-A-U	2
CSW28-100-2RS-B-T	2
CSW28-100-2RS-B-U	2
CSW28-100-2Z-B-T	2
CSW28-100-2Z-B-U	2
CSW28-125-2RS-T	4
CSW28-125-2RS-U	4
CSW28-125-2Z-T	4
CSW28-125-2Z-U	4
CSW28-150-2RS-A-T	3
CSW28-150-2RS-A-U	3
CSW28-150-2Z-A-T	3
CSW28-150-2Z-A-U	3
CSW28-150-2RS-B-T	3
CSW28-150-2RS-B-U	3
CSW28-150-2Z-B-T	3
CSW28-150-2Z-B-U	3
CSW43-120-2RS-T	2
CSW43-120-2RS-U	2
CSW43-120-2Z-T	2
CSW43-120-2Z-U	2
CSW43-150-2RS-A-T	2
CSW43-150-2RS-A-U	2
CSW43-150-2Z-A-T	2
CSW43-150-2Z-A-U	2
CSW43-150-2RS-B-T	2
CSW43-150-2RS-B-U	2
CSW43-150-2Z-B-T	2
CSW43-150-2Z-B-U	2
CSW43-190-2RS-T	4
CSW43-190-2RS-U	4
CSW43-190-2Z-T	4
CSW43-190-2Z-U	4
CSW43-230-2RS-A-T	3

General Data

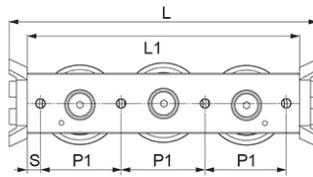
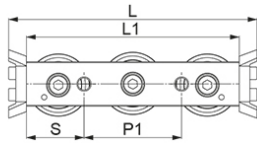
Designation	Number of Fixing Holes
CSW43-230-2RS-A-U	3
CSW43-230-2Z-A-T	3
CSW43-230-2Z-A-U	3
CSW43-230-2RS-B-T	3
CSW43-230-2RS-B-U	3
CSW43-230-2Z-B-T	3
CSW43-230-2Z-B-U	3
CSWK43-120-2Z	2
CSWK43-150-2Z-A	2
CSWK43-150-2Z-B	2
CSWK43-190-2Z	4
CSWK43-230-2Z-A	3
CSWK43-230-2Z-B	3
CSW63-180-2ZR-T	4
CSW63-180-2ZR-U	4
CSW63-235-2ZR-A-T	5
CSW63-235-2ZR-A-U	5
CSW63-235-2ZR-B-T	5
CSW63-235-2ZR-B-U	5
CSW63-290-2ZR-T	6
CSW63-290-2ZR-U	6
CSW63-345-2ZR-A-T	7
CSW63-345-2ZR-A-U	7
CSW63-345-2ZR-B-T	7
CSW63-345-2ZR-B-U	7
CSWK63-180-2ZR	4
CSWK63-235-2ZR-A	5
CSWK63-235-2ZR-B	5
CSWK63-290-2ZR	6
CSWK63-345-2ZR-A	7
CSWK63-345-2ZR-B	7

Dimensions

Sizes 18-28-43

Size 63

CSW/CSWK
with 3 rollers



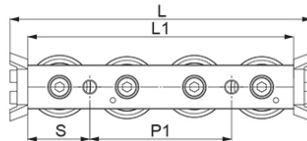
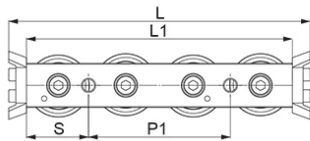
Representation of slider with wiper

Size 18-28-43

Configuration A

Configuration B

CSW/CSWK
with 4 rollers



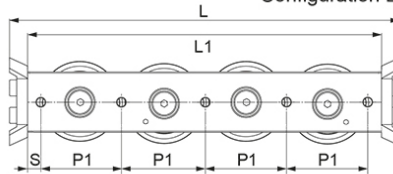
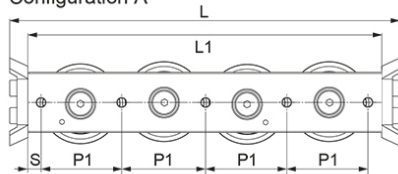
Representation of slider with wiper

Size 63

Configuration A

Configuration B

CSW/CSWK
with 4 rollers

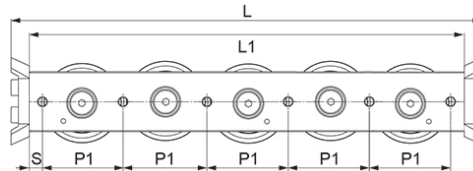
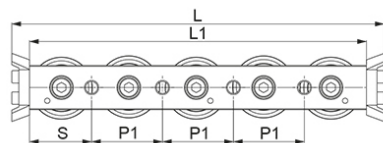


Representation of slider with wiper

Sizes 18-28-43

Size 63

CSW/CSWK
with 5 rollers



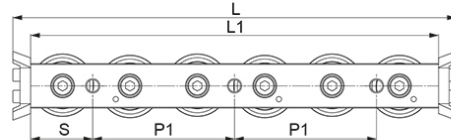
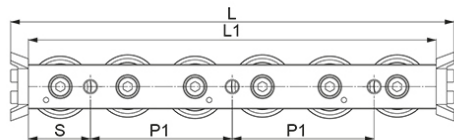
Representation of slider with wiper

Size 18-28-43

Configuration A

Configuration B

CSW/CSWK
with 6 rollers



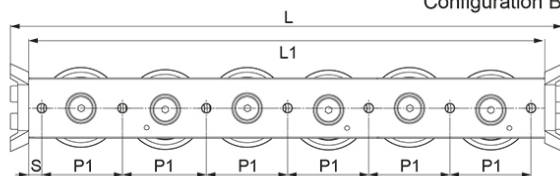
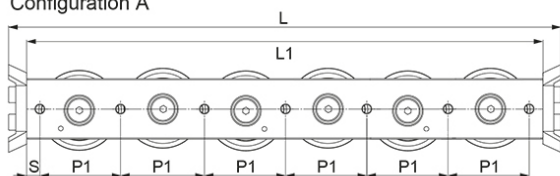
Representation of slider with wiper

Size 63

Configuration A

Configuration B

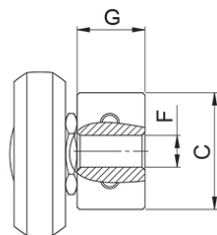
CSW/CSWK
with 6 rollers



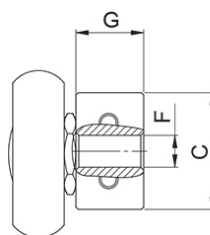
Representation of slider with wiper

Dimensions

CS-slider with prismatic rollers for use in T- and U-rails



CSK-slider with crowned rollers for use in K-rails sizes 43 and 63



Designation	L1	L	C	G	F	P1	S
CSW18-60-2RS-T	60	76	9.5	5.7	M5	20	20
CSW18-60-2RS-U	60	76	9.5	5.7	M5	20	20
CSW18-60-2Z-T	60	76	9.5	5.7	M5	20	20
CSW18-60-2Z-U	60	76	9.5	5.7	M5	20	20
CSW18-80-2RS-A-T	80	96	9.5	5.7	M5	40	20
CSW18-80-2RS-A-U	80	96	9.5	5.7	M5	40	20
CSW18-80-2Z-A-T	80	96	9.5	5.7	M5	40	20
CSW18-80-2Z-A-U	80	96	9.5	5.7	M5	40	20
CSW18-80-2RS-B-T	80	96	9.5	5.7	M5	40	20
CSW18-80-2RS-B-U	80	96	9.5	5.7	M5	40	20
CSW18-80-2Z-B-T	80	96	9.5	5.7	M5	40	20
CSW18-80-2Z-B-U	80	96	9.5	5.7	M5	40	20
CSW18-100-2RS-T	100	116	9.5	5.7	M5	20	20
CSW18-100-2RS-U	100	116	9.5	5.7	M5	20	20
CSW18-100-2Z-T	100	116	9.5	5.7	M5	20	20
CSW18-100-2Z-U	100	116	9.5	5.7	M5	20	20
CSW18-120-2RS-A-T	120	136	9.5	5.7	M5	40	20
CSW18-120-2RS-A-U	120	136	9.5	5.7	M5	40	20
CSW18-120-2Z-A-T	120	136	9.5	5.7	M5	40	20
CSW18-120-2Z-A-U	120	136	9.5	5.7	M5	40	20
CSW18-120-2RS-B-T	120	136	9.5	5.7	M5	40	20
CSW18-120-2RS-B-U	120	136	9.5	5.7	M5	40	20
CSW18-120-2Z-B-T	120	136	9.5	5.7	M5	40	20
CSW18-120-2Z-B-U	120	136	9.5	5.7	M5	40	20
CSW28-80-2RS-T	80	100	14.9	9.7	M5	35	22.5
CSW28-80-2RS-U	80	100	14.9	9.7	M5	35	22.5
CSW28-80-2Z-T	80	100	14.9	9.7	M5	35	22.5
CSW28-80-2Z-U	80	100	14.9	9.7	M5	35	22.5
CSW28-100-2RS-A-T	100	120	14.9	9.7	M5	50	25
CSW28-100-2RS-A-U	100	120	14.9	9.7	M5	50	25
CSW28-100-2Z-A-T	100	120	14.9	9.7	M5	50	25
CSW28-100-2Z-A-U	100	120	14.9	9.7	M5	50	25
CSW28-100-2RS-B-T	100	120	14.9	9.7	M5	50	25
CSW28-100-2RS-B-U	100	120	14.9	9.7	M5	50	25

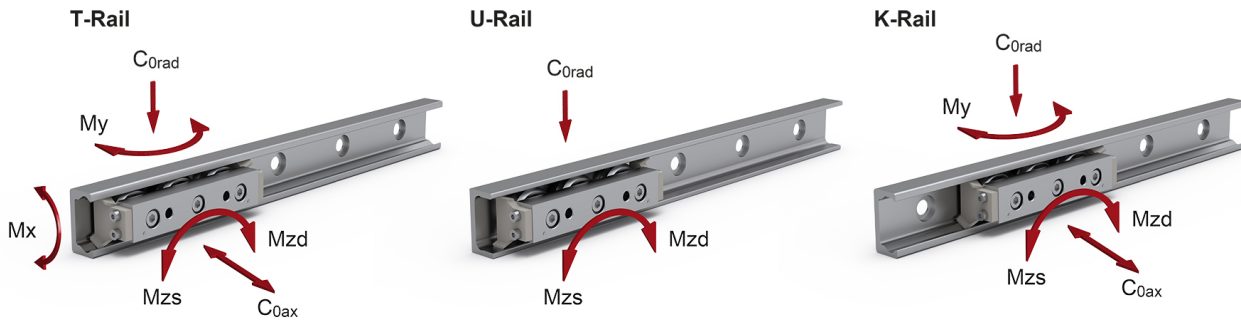
Dimensions

Designation	L1	L	C	G	F	P1	S
CSW28-100-2Z-B-T	100	120	14.9	9.7	M5	50	25
CSW28-100-2Z-B-U	100	120	14.9	9.7	M5	50	25
CSW28-125-2RS-T	125	145	14.9	9.7	M5	25	25
CSW28-125-2RS-U	125	145	14.9	9.7	M5	25	25
CSW28-125-2Z-T	125	145	14.9	9.7	M5	25	25
CSW28-125-2Z-U	125	145	14.9	9.7	M5	25	25
CSW28-150-2RS-A-T	150	170	14.9	9.7	M5	50	25
CSW28-150-2RS-A-U	150	170	14.9	9.7	M5	50	25
CSW28-150-2Z-A-T	150	170	14.9	9.7	M5	50	25
CSW28-150-2Z-A-U	150	170	14.9	9.7	M5	50	25
CSW28-150-2RS-B-T	150	170	14.9	9.7	M5	50	25
CSW28-150-2RS-B-U	150	170	14.9	9.7	M5	50	25
CSW28-150-2Z-B-T	150	170	14.9	9.7	M5	50	25
CSW28-150-2Z-B-U	150	170	14.9	9.7	M5	50	25
CSW43-120-2RS-T	120	140	24.9	14.5	M8	55	32.5
CSW43-120-2RS-U	120	140	24.9	14.5	M8	55	32.5
CSW43-120-2Z-T	120	140	24.9	14.5	M8	55	32.5
CSW43-120-2Z-U	120	140	24.9	14.5	M8	55	32.5
CSW43-150-2RS-A-T	150	170	24.9	14.5	M8	80	35
CSW43-150-2RS-A-U	150	170	24.9	14.5	M8	80	35
CSW43-150-2Z-A-T	150	170	24.9	14.5	M8	80	35
CSW43-150-2Z-A-U	150	170	24.9	14.5	M8	80	35
CSW43-150-2RS-B-T	150	170	24.9	14.5	M8	80	35
CSW43-150-2RS-B-U	150	170	24.9	14.5	M8	80	35
CSW43-150-2Z-B-T	150	170	24.9	14.5	M8	80	35
CSW43-150-2Z-B-U	150	170	24.9	14.5	M8	80	35
CSW43-190-2RS-T	190	210	24.9	14.5	M8	40	35
CSW43-190-2RS-U	190	210	24.9	14.5	M8	40	35
CSW43-190-2Z-T	190	210	24.9	14.5	M8	40	35
CSW43-190-2Z-U	190	210	24.9	14.5	M8	40	35
CSW43-230-2RS-A-T	230	250	24.9	14.5	M8	80	35
CSW43-230-2RS-A-U	230	250	24.9	14.5	M8	80	35
CSW43-230-2Z-A-T	230	250	24.9	14.5	M8	80	35
CSW43-230-2Z-A-U	230	250	24.9	14.5	M8	80	35
CSW43-230-2RS-B-T	230	250	24.9	14.5	M8	80	35
CSW43-230-2RS-B-U	230	250	24.9	14.5	M8	80	35
CSW43-230-2Z-B-T	230	250	24.9	14.5	M8	80	35
CSW43-230-2Z-B-U	230	250	24.9	14.5	M8	80	35
CSWK43-120-2Z	120	140	24.9	14.5	M8	55	32.5
CSWK43-150-2Z-A	150	170	24.9	14.5	M8	80	35
CSWK43-150-2Z-B	150	170	24.9	14.5	M8	80	35
CSWK43-190-2Z	190	210	24.9	14.5	M8	40	35

Dimensions

Designation	L1	L	C	G	F	P1	S
CSWK43-230-2Z-A	230	250	24.9	14.5	M8	80	35
CSWK43-230-2Z-B	230	250	24.9	14.5	M8	80	35
CSW63-180-2ZR-T	180	200	39.5	19.5	M8	54	9
CSW63-180-2ZR-U	180	200	39.5	19.5	M8	54	9
CSW63-235-2ZR-A-T	235	255	39.5	19.5	M8	54	9.5
CSW63-235-2ZR-A-U	235	255	39.5	19.5	M8	54	9.5
CSW63-235-2ZR-B-T	235	255	39.5	19.5	M8	54	9.5
CSW63-235-2ZR-B-U	235	255	39.5	19.5	M8	54	9.5
CSW63-290-2ZR-T	290	310	39.5	19.5	M8	54	10
CSW63-290-2ZR-U	290	310	39.5	19.5	M8	54	10
CSW63-345-2ZR-A-T	345	365	39.5	19.5	M8	54	10.5
CSW63-345-2ZR-A-U	345	365	39.5	19.5	M8	54	10.5
CSW63-345-2ZR-B-T	345	365	39.5	19.5	M8	54	10.5
CSW63-345-2ZR-B-U	345	365	39.5	19.5	M8	54	10.5
CSWK63-180-2ZR	180	200	39.5	19.5	M8	54	9
CSWK63-235-2ZR-A	235	255	39.5	19.5	M8	54	9.5
CSWK63-235-2ZR-B	235	255	39.5	19.5	M8	54	9.5
CSWK63-290-2ZR	290	310	39.5	19.5	M8	54	10
CSWK63-345-2ZR-A	345	365	39.5	19.5	M8	54	10.5
CSWK63-345-2ZR-B	345	365	39.5	19.5	M8	54	10.5

Load & Weight



The load capacities in the following tables each apply for one slider. When using the slider in U-rails (floating bearing rails) the values are $C_{0ax} = 0$, $M_x = 0$ and $M_y = 0$. When using the sliders in K-rails (compensation rails) the value is: $M_x = 0$.

Designation	C (N)	C0rad (N)	C0ax (N)	Mx (Nm)	My (Nm)
CSW18-60-2RS-T	1530	820	260	1.5	4.7
CSW18-60-2RS-U	1530	820	260	1.5	4.7
CSW18-60-2Z-T	1530	820	260	1.5	4.7
CSW18-60-2Z-U	1530	820	260	1.5	4.7
CSW18-80-2RS-A-T	1530	820	300	2.8	7
CSW18-80-2RS-A-U	1530	820	300	2.8	7
CSW18-80-2Z-A-T	1530	820	300	2.8	7
CSW18-80-2Z-A-U	1530	820	300	2.8	7
CSW18-80-2RS-B-T	1530	820	300	2.8	7
CSW18-80-2RS-B-U	1530	820	300	2.8	7
CSW18-80-2Z-B-T	1530	820	300	2.8	7
CSW18-80-2Z-B-U	1530	820	300	2.8	7
CSW18-100-2RS-T	1830	975	360	2.8	9.4
CSW18-100-2RS-U	1830	975	360	2.8	9.4
CSW18-100-2Z-T	1830	975	360	2.8	9.4
CSW18-100-2Z-U	1830	975	360	2.8	9.4
CSW18-120-2RS-A-T	1830	975	440	3.3	11.8
CSW18-120-2RS-A-U	1830	975	440	3.3	11.8
CSW18-120-2Z-A-T	1830	975	440	3.3	11.8
CSW18-120-2Z-A-U	1830	975	440	3.3	11.8
CSW18-120-2RS-B-T	1830	975	440	3.3	11.8
CSW18-120-2RS-B-U	1830	975	440	3.3	11.8
CSW18-120-2Z-B-T	1830	975	440	3.3	11.8
CSW18-120-2Z-B-U	1830	975	440	3.3	11.8
CSW28-80-2RS-T	4260	2170	640	6.2	16
CSW28-80-2RS-U	4260	2170	640	6.2	16
CSW28-80-2Z-T	4260	2170	640	6.2	16
CSW28-80-2Z-U	4260	2170	640	6.2	16
CSW28-100-2RS-A-T	4260	2170	750	11.5	21.7
CSW28-100-2RS-A-U	4260	2170	750	11.5	21.7
CSW28-100-2Z-A-T	4260	2170	750	11.5	21.7
CSW28-100-2Z-A-U	4260	2170	750	11.5	21.7

Load & Weight

Designation	C (N)	C0rad (N)	C0ax (N)	Mx (Nm)	My (Nm)
CSW28-100-2RS-B-T	4260	2170	750	11.5	21.7
CSW28-100-2RS-B-U	4260	2170	750	11.5	21.7
CSW28-100-2Z-B-T	4260	2170	750	11.5	21.7
CSW28-100-2Z-B-U	4260	2170	750	11.5	21.7
CSW28-125-2RS-T	5065	2580	900	11.5	29
CSW28-125-2RS-U	5065	2580	900	11.5	29
CSW28-125-2Z-T	5065	2580	900	11.5	29
CSW28-125-2Z-U	5065	2580	900	11.5	29
CSW28-150-2RS-A-T	5065	2580	1070	13.7	36.2
CSW28-150-2RS-A-U	5065	2580	1070	13.7	36.2
CSW28-150-2Z-A-T	5065	2580	1070	13.7	36.2
CSW28-150-2Z-A-U	5065	2580	1070	13.7	36.2
CSW28-150-2RS-B-T	5065	2580	1070	13.7	36.2
CSW28-150-2RS-B-U	5065	2580	1070	13.7	36.2
CSW28-150-2Z-B-T	5065	2580	1070	13.7	36.2
CSW28-150-2Z-B-U	5065	2580	1070	13.7	36.2
CSW43-120-2RS-T	12280	5500	1570	23.6	60
CSW43-120-2RS-U	12280	5500	1570	23.6	60
CSW43-120-2Z-T	12280	5500	1570	23.6	60
CSW43-120-2Z-U	12280	5500	1570	23.6	60
CSW43-150-2RS-A-T	12280	5500	1855	43.6	81.5
CSW43-150-2RS-A-U	12280	5500	1855	43.6	81.5
CSW43-150-2Z-A-T	12280	5500	1855	43.6	81.5
CSW43-150-2Z-A-U	12280	5500	1855	43.6	81.5
CSW43-150-2RS-B-T	12280	5500	1855	43.6	81.5
CSW43-150-2RS-B-U	12280	5500	1855	43.6	81.5
CSW43-150-2Z-B-T	12280	5500	1855	43.6	81.5
CSW43-150-2Z-B-U	12280	5500	1855	43.6	81.5
CSW43-190-2RS-T	14675	6540	2215	43.6	108.6
CSW43-190-2RS-U	14675	6540	2215	43.6	108.6
CSW43-190-2Z-T	14675	6540	2215	43.6	108.6
CSW43-190-2Z-U	14675	6540	2215	43.6	108.6
CSW43-230-2RS-A-T	14675	6540	2645	52	135.8
CSW43-230-2RS-A-U	14675	6540	2645	52	135.8
CSW43-230-2Z-A-T	14675	6540	2645	52	135.8
CSW43-230-2Z-A-U	14675	6540	2645	52	135.8
CSW43-230-2RS-B-T	14675	6540	2645	52	135.8
CSW43-230-2RS-B-U	14675	6540	2645	52	135.8
CSW43-230-2Z-B-T	14675	6540	2645	52	135.8
CSW43-230-2Z-B-U	14675	6540	2645	52	135.8
CSWK43-120-2Z	12280	5100	1320	0	50.4
CSWK43-150-2Z-A	12280	5100	1320	0	54.3

Load & Weight

Designation	C (N)	C0rad (N)	C0ax (N)	Mx (Nm)	My (Nm)
CSWK43-150-2Z-B	12280	5100	1320	0	54.3
CSWK43-190-2Z	14675	6065	1570	0	108.7
CSWK43-230-2Z-A	14675	6065	1570	0	108.7
CSWK43-230-2Z-B	14675	6065	1570	0	108.7
CSW63-180-2ZR-T	30750	12500	6000	125	271
CSW63-180-2ZR-U	30750	12500	6000	125	271
CSW63-235-2ZR-A-T	30750	12500	7200	250	413
CSW63-235-2ZR-A-U	30750	12500	7200	250	413
CSW63-235-2ZR-B-T	30750	12500	7200	250	413
CSW63-235-2ZR-B-U	30750	12500	7200	250	413
CSW63-290-2ZR-T	36600	15000	8500	250	511
CSW63-290-2ZR-U	36600	15000	8500	250	511
CSW63-345-2ZR-A-T	36600	15000	10000	350	689
CSW63-345-2ZR-A-U	36600	15000	10000	350	689
CSW63-345-2ZR-B-T	36600	15000	10000	350	689
CSW63-345-2ZR-B-U	36600	15000	10000	350	689
CSWK63-180-2ZR	30750	11550	5045	0	235
CSWK63-235-2ZR-A	30750	11550	5045	0	294
CSWK63-235-2ZR-B	30750	11550	5045	0	294
CSWK63-290-2ZR	36600	13745	6000	0	589
CSWK63-345-2ZR-A	36600	13745	6000	0	589
CSWK63-345-2ZR-B	36600	13745	6000	0	589

Designation	Mzd (Nm)	Mzs (Nm)	Weight (kg)
CSW18-60-2RS-T	8.2	8.2	0.04
CSW18-60-2RS-U	8.2	8.2	0.04
CSW18-60-2Z-T	8.2	8.2	0.04
CSW18-60-2Z-U	8.2	8.2	0.04
CSW18-80-2RS-A-T	8.2	24.7	0.05
CSW18-80-2RS-A-U	8.2	24.7	0.05
CSW18-80-2Z-A-T	8.2	24.7	0.05
CSW18-80-2Z-A-U	8.2	24.7	0.05
CSW18-80-2RS-B-T	24.7	8.2	0.05
CSW18-80-2RS-B-U	24.7	8.2	0.05
CSW18-80-2Z-B-T	24.7	8.2	0.05
CSW18-80-2Z-B-U	24.7	8.2	0.05
CSW18-100-2RS-T	24.7	24.7	0.06
CSW18-100-2RS-U	24.7	24.7	0.06
CSW18-100-2Z-T	24.7	24.7	0.06
CSW18-100-2Z-U	24.7	24.7	0.06
CSW18-120-2RS-A-T	24.7	41.1	0.07
CSW18-120-2RS-A-U	24.7	41.1	0.07

Load & Weight

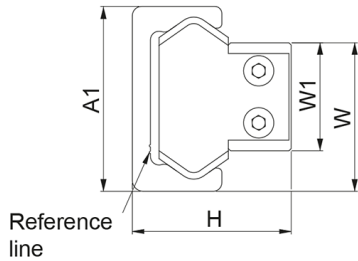
Designation	Mzd (Nm)	Mzs (Nm)	Weight (kg)
CSW18-120-2Z-A-T	24.7	41.1	0.07
CSW18-120-2Z-A-U	24.7	41.1	0.07
CSW18-120-2RS-B-T	41.1	24.7	0.07
CSW18-120-2RS-B-U	41.1	24.7	0.07
CSW18-120-2Z-B-T	41.1	24.7	0.07
CSW18-120-2Z-B-U	41.1	24.7	0.07
CSW28-80-2RS-T	27.2	27.2	0.155
CSW28-80-2RS-U	27.2	27.2	0.155
CSW28-80-2Z-T	27.2	27.2	0.155
CSW28-80-2Z-U	27.2	27.2	0.155
CSW28-100-2RS-A-T	27.2	81.7	0.195
CSW28-100-2RS-A-U	27.2	81.7	0.195
CSW28-100-2Z-A-T	27.2	81.7	0.195
CSW28-100-2Z-A-U	27.2	81.7	0.195
CSW28-100-2RS-B-T	81.7	27.2	0.195
CSW28-100-2RS-B-U	81.7	27.2	0.195
CSW28-100-2Z-B-T	81.7	27.2	0.195
CSW28-100-2Z-B-U	81.7	27.2	0.195
CSW28-125-2RS-T	81.7	81.7	0.24
CSW28-125-2RS-U	81.7	81.7	0.24
CSW28-125-2Z-T	81.7	81.7	0.24
CSW28-125-2Z-U	81.7	81.7	0.24
CSW28-150-2RS-A-T	81.7	136.1	0.29
CSW28-150-2RS-A-U	81.7	136.1	0.29
CSW28-150-2Z-A-T	81.7	136.1	0.29
CSW28-150-2Z-A-U	81.7	136.1	0.29
CSW28-150-2RS-B-T	136.1	81.7	0.29
CSW28-150-2RS-B-U	136.1	81.7	0.29
CSW28-150-2Z-B-T	136.1	81.7	0.29
CSW28-150-2Z-B-U	136.1	81.7	0.29
CSW43-120-2RS-T	104.5	104.5	0.53
CSW43-120-2RS-U	104.5	104.5	0.53
CSW43-120-2Z-T	104.5	104.5	0.53
CSW43-120-2Z-U	104.5	104.5	0.53
CSW43-150-2RS-A-T	104.5	313.5	0.68
CSW43-150-2RS-A-U	104.5	313.5	0.68
CSW43-150-2Z-A-T	104.5	313.5	0.68
CSW43-150-2Z-A-U	104.5	313.5	0.68
CSW43-150-2RS-B-T	313.5	104.5	0.68
CSW43-150-2RS-B-U	313.5	104.5	0.68
CSW43-150-2Z-B-T	313.5	104.5	0.68
CSW43-150-2Z-B-U	313.5	104.5	0.68

Load & Weight

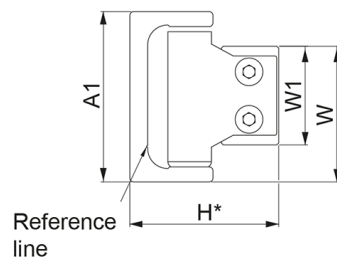
Designation	Mzd (Nm)	Mzs (Nm)	Weight (kg)
CSW43-190-2RS-T	313.5	313.5	0.84
CSW43-190-2RS-U	313.5	313.5	0.84
CSW43-190-2Z-T	313.5	313.5	0.84
CSW43-190-2Z-U	313.5	313.5	0.84
CSW43-230-2RS-A-T	313.5	522.5	1.01
CSW43-230-2RS-A-U	313.5	522.5	1.01
CSW43-230-2Z-A-T	313.5	522.5	1.01
CSW43-230-2Z-A-U	313.5	522.5	1.01
CSW43-230-2RS-B-T	522.5	313.5	1.01
CSW43-230-2RS-B-U	522.5	313.5	1.01
CSW43-230-2Z-B-T	522.5	313.5	1.01
CSW43-230-2Z-B-U	522.5	313.5	1.01
CSWK43-120-2Z	96.9	96.9	0.53
CSWK43-150-2Z-A	96.9	290.7	0.68
CSWK43-150-2Z-B	290.7	96.9	0.68
CSWK43-190-2Z	290.7	290.7	0.84
CSWK43-230-2Z-A	290.7	484.5	1.01
CSWK43-230-2Z-B	484.5	290.7	1.01
CSW63-180-2ZR-T	367	367	1.66
CSW63-180-2ZR-U	367	367	1.66
CSW63-235-2ZR-A-T	367	1100	2.17
CSW63-235-2ZR-A-U	367	1100	2.17
CSW63-235-2ZR-B-T	1100	367	2.17
CSW63-235-2ZR-B-U	1100	367	2.17
CSW63-290-2ZR-T	1100	1100	2.67
CSW63-290-2ZR-U	1100	1100	2.67
CSW63-345-2ZR-A-T	1100	1830	3.17
CSW63-345-2ZR-A-U	1100	1830	3.17
CSW63-345-2ZR-B-T	1830	1100	3.17
CSW63-345-2ZR-B-U	1830	1100	3.17
CSWK63-180-2ZR	335	335	1.66
CSWK63-235-2ZR-A	335	935	2.17
CSWK63-235-2ZR-B	935	335	2.17
CSWK63-290-2ZR	935	935	2.67
CSWK63-345-2ZR-A	935	1560	3.17
CSWK63-345-2ZR-B	1560	935	3.17

Rail/Slider Combination

T-rail with CSW slider

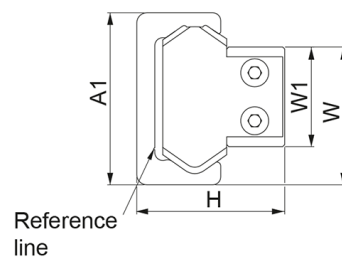


U-rail with CSW slider



* Nom. value

K-rail with CSWK-slider



The K-rail enables the slider to twist around its longitudinal axis.

Designation	A1	H (Slider+T-rail)	H (Slider+U-rail)	H (Slider+K-rail)	W1
CSW18-60-2RS-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-60-2RS-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-60-2Z-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-60-2Z-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2RS-A-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2RS-A-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2Z-A-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2Z-A-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2RS-B-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2RS-B-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2Z-B-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-80-2Z-B-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-100-2RS-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-100-2RS-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-100-2Z-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-100-2Z-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2RS-A-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2RS-A-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2Z-A-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2Z-A-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2RS-B-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2RS-B-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2Z-B-T	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW18-120-2Z-B-U	18 (+0.25/-0.10)	15 (+0.15/-0.15)	15*	n/a	9.5 (0/-0.05)
CSW28-80-2RS-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-80-2RS-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-80-2Z-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-80-2Z-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-100-2RS-A-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-100-2RS-A-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-100-2Z-A-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)

Rail/Slider Combination

Designation	A1	H (Slider+T-rail)	H (Slider+U-rail)	H (Slider+K-rail)	W1
CSW28-100-2Z-A-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-100-2RS-B-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-100-2RS-B-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-100-2Z-B-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-100-2Z-B-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-125-2RS-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-125-2RS-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-125-2Z-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-125-2Z-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2RS-A-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2RS-A-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2Z-A-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2Z-A-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2RS-B-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2RS-B-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2Z-B-T	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW28-150-2Z-B-U	28 (+0.25/-0.10)	23.9 (+0.15/-0.15)	23.9*	n/a	14.9 (0/-0.10)
CSW43-120-2RS-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-120-2RS-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-120-2Z-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-120-2Z-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2RS-A-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2RS-A-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2Z-A-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2Z-A-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2RS-B-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2RS-B-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2Z-B-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-150-2Z-B-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-190-2RS-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-190-2RS-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-190-2Z-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-190-2Z-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2RS-A-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2RS-A-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2Z-A-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2Z-A-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2RS-B-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2RS-B-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2Z-B-T	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSW43-230-2Z-B-U	43 (+0.35/-0.10)	37 (+0.15/-0.15)	37*	n/a	24.9 (0/-0.15)
CSWK43-120-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (+0.15/-0.15)	24.9 (0/-0.15)

Rail/Slider Combination

Designation	A1	H (Slider+T-rail)	H (Slider+U-rail)	H (Slider+K-rail)	W1
CSWK43-150-2Z-A	43 (+0.35/-0.10)	n/a	n/a	37 (+0.15/-0.15)	24.9 (0/-0.15)
CSWK43-150-2Z-B	43 (+0.35/-0.10)	n/a	n/a	37 (+0.15/-0.15)	24.9 (0/-0.15)
CSWK43-190-2Z	43 (+0.35/-0.10)	n/a	n/a	37 (+0.15/-0.15)	24.9 (0/-0.15)
CSWK43-230-2Z-A	43 (+0.35/-0.10)	n/a	n/a	37 (+0.15/-0.15)	24.9 (0/-0.15)
CSWK43-230-2Z-B	43 (+0.35/-0.10)	n/a	n/a	37 (+0.15/-0.15)	24.9 (0/-0.15)
CSW63-180-2ZR-T	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-180-2ZR-U	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-235-2ZR-A-T	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-235-2ZR-A-U	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-235-2ZR-B-T	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-235-2ZR-B-U	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-290-2ZR-T	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-290-2ZR-U	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-345-2ZR-A-T	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-345-2ZR-A-U	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-345-2ZR-B-T	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSW63-345-2ZR-B-U	63 (+0.35/-0.10)	49.8 (+0.15/-0.15)	49.8*	n/a	39.5 (+0.15/0)
CSWK63-180-2ZR	63 (+0.35/-0.10)	n/a	n/a	49.8 (+0.15/-0.15)	39.5 (+0.15/0)
CSWK63-235-2ZR-A	63 (+0.35/-0.10)	n/a	n/a	49.8 (+0.15/-0.15)	39.5 (+0.15/0)
CSWK63-235-2ZR-B	63 (+0.35/-0.10)	n/a	n/a	49.8 (+0.15/-0.15)	39.5 (+0.15/0)
CSWK63-290-2ZR	63 (+0.35/-0.10)	n/a	n/a	49.8 (+0.15/-0.15)	39.5 (+0.15/0)
CSWK63-345-2ZR-A	63 (+0.35/-0.10)	n/a	n/a	49.8 (+0.15/-0.15)	39.5 (+0.15/0)
CSWK63-345-2ZR-B	63 (+0.35/-0.10)	n/a	n/a	49.8 (+0.15/-0.15)	39.5 (+0.15/0)

Designation	W
CSW18-60-2RS-T	14 (+0.05/-0.25)
CSW18-60-2RS-U	14 (+0.05/-0.25)
CSW18-60-2Z-T	14 (+0.05/-0.25)
CSW18-60-2Z-U	14 (+0.05/-0.25)
CSW18-80-2RS-A-T	14 (+0.05/-0.25)
CSW18-80-2RS-A-U	14 (+0.05/-0.25)
CSW18-80-2Z-A-T	14 (+0.05/-0.25)
CSW18-80-2Z-A-U	14 (+0.05/-0.25)
CSW18-80-2RS-B-T	14 (+0.05/-0.25)
CSW18-80-2RS-B-U	14 (+0.05/-0.25)
CSW18-80-2Z-B-T	14 (+0.05/-0.25)
CSW18-80-2Z-B-U	14 (+0.05/-0.25)
CSW18-100-2RS-T	14 (+0.05/-0.25)
CSW18-100-2RS-U	14 (+0.05/-0.25)
CSW18-100-2Z-T	14 (+0.05/-0.25)
CSW18-100-2Z-U	14 (+0.05/-0.25)
CSW18-120-2RS-A-T	14 (+0.05/-0.25)

Rail/Slider Combination

Designation	W
CSW18-120-2RS-A-U	14 (+0.05/-0.25)
CSW18-120-2Z-A-T	14 (+0.05/-0.25)
CSW18-120-2Z-A-U	14 (+0.05/-0.25)
CSW18-120-2RS-B-T	14 (+0.05/-0.25)
CSW18-120-2RS-B-U	14 (+0.05/-0.25)
CSW18-120-2Z-B-T	14 (+0.05/-0.25)
CSW18-120-2Z-B-U	14 (+0.05/-0.25)
CSW28-80-2RS-T	21.7 (+0.05/-0.35)
CSW28-80-2RS-U	21.7 (+0.05/-0.35)
CSW28-80-2Z-T	21.7 (+0.05/-0.35)
CSW28-80-2Z-U	21.7 (+0.05/-0.35)
CSW28-100-2RS-A-T	21.7 (+0.05/-0.35)
CSW28-100-2RS-A-U	21.7 (+0.05/-0.35)
CSW28-100-2Z-A-T	21.7 (+0.05/-0.35)
CSW28-100-2Z-A-U	21.7 (+0.05/-0.35)
CSW28-100-2RS-B-T	21.7 (+0.05/-0.35)
CSW28-100-2RS-B-U	21.7 (+0.05/-0.35)
CSW28-100-2Z-B-T	21.7 (+0.05/-0.35)
CSW28-100-2Z-B-U	21.7 (+0.05/-0.35)
CSW28-125-2RS-T	21.7 (+0.05/-0.35)
CSW28-125-2RS-U	21.7 (+0.05/-0.35)
CSW28-125-2Z-T	21.7 (+0.05/-0.35)
CSW28-125-2Z-U	21.7 (+0.05/-0.35)
CSW28-150-2RS-A-T	21.7 (+0.05/-0.35)
CSW28-150-2RS-A-U	21.7 (+0.05/-0.35)
CSW28-150-2Z-A-T	21.7 (+0.05/-0.35)
CSW28-150-2Z-A-U	21.7 (+0.05/-0.35)
CSW28-150-2RS-B-T	21.7 (+0.05/-0.35)
CSW28-150-2RS-B-U	21.7 (+0.05/-0.35)
CSW28-150-2Z-B-T	21.7 (+0.05/-0.35)
CSW28-150-2Z-B-U	21.7 (+0.05/-0.35)
CSW43-120-2RS-T	34.3 (+0.15/-0.30)
CSW43-120-2RS-U	34.3 (+0.15/-0.30)
CSW43-120-2Z-T	34.3 (+0.15/-0.30)
CSW43-120-2Z-U	34.3 (+0.15/-0.30)
CSW43-150-2RS-A-T	34.3 (+0.15/-0.30)
CSW43-150-2RS-A-U	34.3 (+0.15/-0.30)
CSW43-150-2Z-A-T	34.3 (+0.15/-0.30)
CSW43-150-2Z-A-U	34.3 (+0.15/-0.30)
CSW43-150-2RS-B-T	34.3 (+0.15/-0.30)
CSW43-150-2RS-B-U	34.3 (+0.15/-0.30)
CSW43-150-2Z-B-T	34.3 (+0.15/-0.30)

Rail/Slider Combination

Designation	W
CSW43-150-2Z-B-U	34.3 (+0.15/-0.30)
CSW43-190-2RS-T	34.3 (+0.15/-0.30)
CSW43-190-2RS-U	34.3 (+0.15/-0.30)
CSW43-190-2Z-T	34.3 (+0.15/-0.30)
CSW43-190-2Z-U	34.3 (+0.15/-0.30)
CSW43-230-2RS-A-T	34.3 (+0.15/-0.30)
CSW43-230-2RS-A-U	34.3 (+0.15/-0.30)
CSW43-230-2Z-A-T	34.3 (+0.15/-0.30)
CSW43-230-2Z-A-U	34.3 (+0.15/-0.30)
CSW43-230-2RS-B-T	34.3 (+0.15/-0.30)
CSW43-230-2RS-B-U	34.3 (+0.15/-0.30)
CSW43-230-2Z-B-T	34.3 (+0.15/-0.30)
CSW43-230-2Z-B-U	34.3 (+0.15/-0.30)
CSWK43-120-2Z	34.3 (+0.10/-0.30)
CSWK43-150-2Z-A	34.3 (+0.10/-0.30)
CSWK43-150-2Z-B	34.3 (+0.10/-0.30)
CSWK43-190-2Z	34.3 (+0.10/-0.30)
CSWK43-230-2Z-A	34.3 (+0.10/-0.30)
CSWK43-230-2Z-B	34.3 (+0.10/-0.30)
CSW63-180-2ZR-T	51.6 (+0.15/-0.30)
CSW63-180-2ZR-U	51.6 (+0.15/-0.30)
CSW63-235-2ZR-A-T	51.6 (+0.15/-0.30)
CSW63-235-2ZR-A-U	51.6 (+0.15/-0.30)
CSW63-235-2ZR-B-T	51.6 (+0.15/-0.30)
CSW63-235-2ZR-B-U	51.6 (+0.15/-0.30)
CSW63-290-2ZR-T	51.6 (+0.15/-0.30)
CSW63-290-2ZR-U	51.6 (+0.15/-0.30)
CSW63-345-2ZR-A-T	51.6 (+0.15/-0.30)
CSW63-345-2ZR-A-U	51.6 (+0.15/-0.30)
CSW63-345-2ZR-B-T	51.6 (+0.15/-0.30)
CSW63-345-2ZR-B-U	51.6 (+0.15/-0.30)
CSWK63-180-2ZR	51.6 (+0.15/-0.30)
CSWK63-235-2ZR-A	51.6 (+0.15/-0.30)
CSWK63-235-2ZR-B	51.6 (+0.15/-0.30)
CSWK63-290-2ZR	51.6 (+0.15/-0.30)
CSWK63-345-2ZR-A	51.6 (+0.15/-0.30)
CSWK63-345-2ZR-B	51.6 (+0.15/-0.30)

Rollers CPN-CPA

Available individually in all sizes as eccentric or concentric rollers. Prismatic roller for T- and U-rail.

Roller seals: Standard 2Z (2ZR for size 63) is the steel cover disc, which is supplied on all standard sliders.

For dusty environment and splash-proof applications, 2RS rubber seal rollers are available.

Rollers are lubricated for life

Dimensions in mm.

Material: Steel 100Cr6. Also available in stainless steel AISI 440.



General Data

Designation	Size	Roller type	Material
CPN18-2RS	18	Concentric	Steel
CXPNX18-2RS	18	Concentric	Stainless steel
CPN18-2Z	18	Concentric	Steel
CPA18-2RS	18	Eccentric	Steel
CXPAX18-2RS	18	Eccentric	Stainless steel
CPA18-2Z	18	Eccentric	Steel
CPN28-2RS	28	Concentric	Steel
CXPNX28-2RS	28	Concentric	Stainless steel
CPN28-2Z	28	Concentric	Steel
CPA28-2RS	28	Eccentric	Steel
CXPAX28-2RS	28	Eccentric	Stainless steel
CPA28-2Z	28	Eccentric	Steel
CPN43-2RS	43	Concentric	Steel
CXPNX43-2RS	43	Concentric	Stainless steel
CPN43-2Z	43	Concentric	Steel
CPA43-2RS	43	Eccentric	Steel
CXPAX43-2RS	43	Eccentric	Stainless steel
CPA43-2Z	43	Eccentric	Steel
CPN63-2ZR	63	Concentric	Steel
CXPNX63-2RS	63	Concentric	Stainless steel
CPA63-2ZR	63	Eccentric	Steel
CXPAX63-2RS	63	Eccentric	Stainless steel

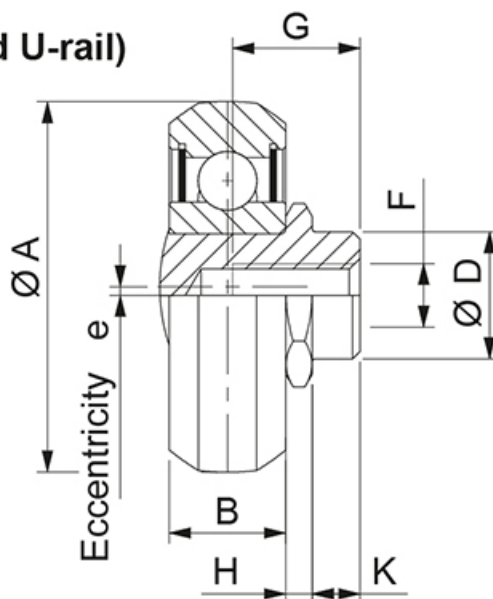
Dimensions

Version

Prismatic (T- and U-rail)

CPN
Concentric roller

CPA
Eccentric roller

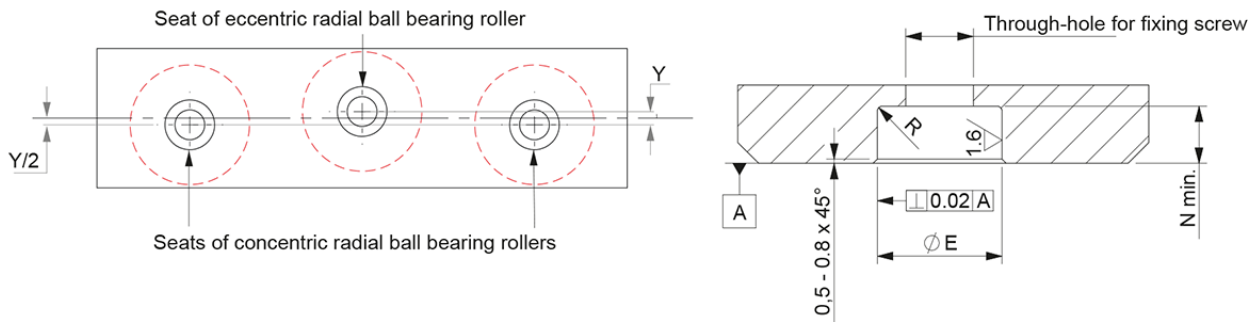


Designation	A	B	D	e	H	G	F	K
CPN18-2RS	14	4	6	-	1.55	5.5	M4	1.8
CXPNX18-2RS	14	4	6	-	1.55	5.5	M4	1.8
CPN18-2Z	14	4	6	-	1.55	5.5	M4	1.8
CPA18-2RS	14	4	6	0.4	1.55	5.5	M4	1.8
CXPAX18-2RS	14	4	6	0.4	1.55	5.5	M4	1.8
CPA18-2Z	14	4	6	0.4	1.55	5.5	M4	1.8
CPN28-2RS	23.2	7	10	-	2.2	7	M5	3.8
CXPNX28-2RS	23.2	7	10	-	2.2	7	M5	3.8
CPN28-2Z	23.2	7	10	-	2.2	7	M5	3.8
CPA28-2RS	23.2	7	10	0.6	2.2	7	M5	3.8
CXPAX28-2RS	23.2	7	10	0.6	2.2	7	M5	3.8
CPA28-2Z	23.2	7	10	0.6	2.2	7	M5	3.8
CPN43-2RS	35	11	12	-	2.5	12	M6	4.5
CXPNX43-2RS	35	11	12	-	2.5	12	M6	4.5
CPN43-2Z	35	11	12	-	2.5	12	M6	4.5
CPA43-2RS	35	11	12	0.8	2.5	12	M6	4.5
CXPAX43-2RS	35	11	12	0.8	2.5	12	M6	4.5
CPA43-2Z	35	11	12	0.8	2.5	12	M6	4.5
CPN63-2ZR	50	17.5	18	-	2.3	16	M8	6
CXPNX63-2RS	50	17.5	18	-	2.3	16	M8	6
CPA63-2ZR	50	17.5	18	1.2	2.3	16	M10	6
CXPAX63-2RS	50	17.5	18	1.2	2.3	16	M10	6

Load & Weight

Designation	C (N)	C0rad (N)	Weight (kg)
CPN18-2RS	765	410	0.004
CXPNX18-2RS	765	410	0.004
CPN18-2Z	765	410	0.004
CPA18-2RS	765	410	0.004
CXPAX18-2RS	765	410	0.004
CPA18-2Z	765	410	0.004
CPN28-2RS	2130	1085	0.019
CXPNX28-2RS	2130	1085	0.019
CPN28-2Z	2130	1085	0.019
CPA28-2RS	2130	1085	0.019
CXPAX28-2RS	2130	1085	0.019
CPA28-2Z	2130	1085	0.019
CPN43-2RS	6140	2750	0.06
CXPNX43-2RS	6140	2750	0.06
CPN43-2Z	6140	2750	0.06
CPA43-2RS	6140	2750	0.06
CXPAX43-2RS	6140	2750	0.06
CPA43-2Z	6140	2750	0.06
CPN63-2ZR	15375	6250	0.19
CXPNX63-2RS	15375	6250	0.19
CPA63-2ZR	15375	6250	0.19
CXPAX63-2RS	15375	6250	0.19

Assembly Dimensions & Tolerances



When installing Radial ball bearing rollers on your own structure we advise:

- Using a maximum of 2 concentric radial ball bearing rollers.
- Offset the seats of the concentric radial ball bearing rollers with respect to those of the eccentric radial ball bearing rollers according to the information below.

Designation	Y	E	N min.	Radius R
CPN18-2RS	0.30	6 + 0.025/+0.01	2.1	0.5
CXPNX18-2RS	0.30	6 + 0.025/+0.01	2.1	0.5
CPN18-2Z	0.30	6 + 0.025/+0.01	2.1	0.5
CPA18-2RS	0.30	6 + 0.025/+0.01	2.1	0.5
CXPAX18-2RS	0.30	6 + 0.025/+0.01	2.1	0.5
CPA18-2Z	0.30	6 + 0.025/+0.01	2.1	0.5
CPN28-2RS	0.64	10 + 0.03/+0.01	4.0	0.5
CXPNX28-2RS	0.64	10 + 0.03/+0.01	4.0	0.5
CPN28-2Z	0.64	10 + 0.03/+0.01	4.0	0.5
CPA28-2RS	0.64	10 + 0.03/+0.01	4.0	0.5
CXPAX28-2RS	0.64	10 + 0.03/+0.01	4.0	0.5
CPA28-2Z	0.64	10 + 0.03/+0.01	4.0	0.5
CPN43-2RS	0.72	12 + 0.05/+0.02	5.5	1
CXPNX43-2RS	0.72	12 + 0.05/+0.02	5.5	1
CPN43-2Z	0.72	12 + 0.05/+0.02	5.5	1
CPA43-2RS	0.72	12 + 0.05/+0.02	5.5	1
CXPAX43-2RS	0.72	12 + 0.05/+0.02	5.5	1
CPA43-2Z	0.72	12 + 0.05/+0.02	5.5	1
CPN63-2ZR	0.55	18 + 0.02/-0.02	7	1
CXPNX63-2RS	0.55	18 + 0.02/-0.02	7	1
CPA63-2ZR	0.55	18 + 0.02/-0.02	7	1
CXPAX63-2RS	0.55	18 + 0.02/-0.02	7	1

Rollers CRPN-CRPA

Available individually in all sizes as eccentric or concentric rollers. Crowned roller for K-rail.

Roller seals: Standard 2Z (2ZR for size 63) is the steel cover disc, which is supplied on all standard sliders.

For dusty environment and splash-proof applications, 2RS rubber seal rollers are available.

Rollers are lubricated for life.

Dimensions in mm.

Material: Steel 100Cr6. Also available in stainless steel AISI 440.



General Data

Designation	Size	Roller type	Material
CRPN43-2Z	43	Concentric	Steel
CRXPNX43-2RS	43	Concentric	Stainless steel
CRPA43-2Z	43	Eccentric	Steel
CRXPAX43-2RS	43	Eccentric	Stainless steel
CRPN63-2ZR	63	Concentric	Steel
CRXPNX63-2RS	63	Concentric	Stainless steel
CRPA63-2ZR	63	Eccentric	Steel
CRXPAX63-2RS	63	Eccentric	Stainless steel

Dimensions

Version

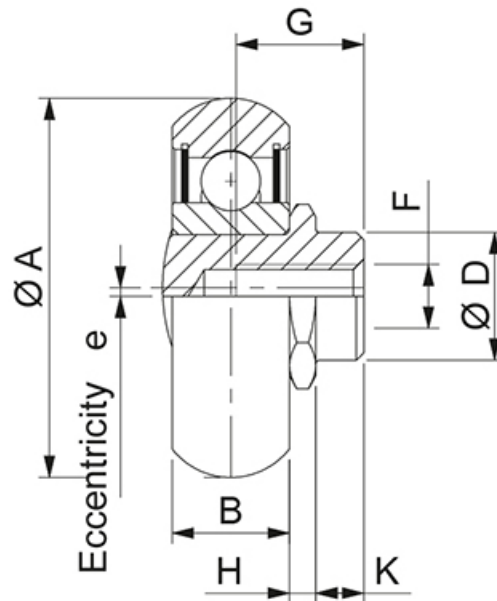
Crowned (K-rail)

CRPN

Concentric roller

CRPA

Eccentric roller

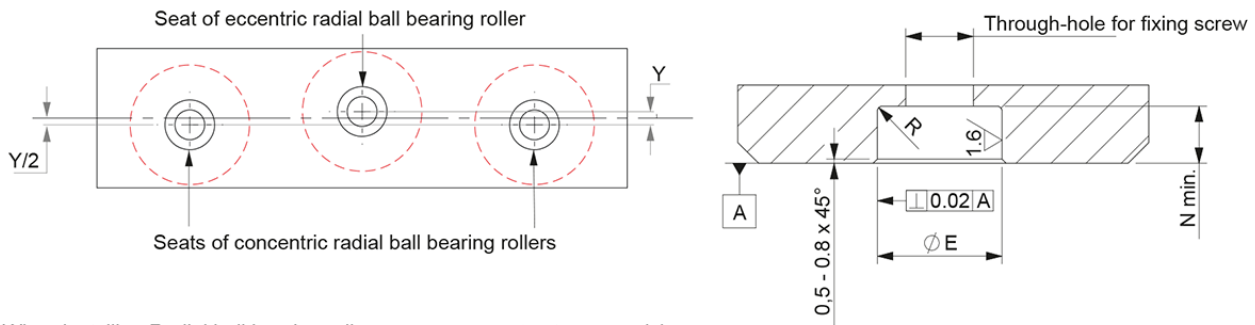


Designation	A	B	D	e	H	G	F	K
CRPN43-2Z	35.6	11	12	-	2.5	12	M6	4.5
CRXPNX43-2RS	35.6	11	12	-	2.5	12	M6	4.5
CRPA43-2Z	35.6	11	12	0.8	2.5	12	M6	4.5
CRXPAX43-2RS	35.6	11	12	0.8	2.5	12	M6	4.5
CRPN63-2ZR	49.7	17.5	18	-	2.3	16	M8	6
CRXPNX63-2RS	49.7	17.5	18	-	2.3	16	M8	6
CRPA63-2ZR	49.7	17.5	18	1.2	2.3	16	M10	6
CRXPAX63-2RS	49.7	17.5	18	1.2	2.3	16	M10	6

Load & Weight

Designation	C (N)	C0rad (N)	Weight (kg)
CRPN43-2Z	6140	2550	0.06
CRXPNX43-2RS	6140	2550	0.06
CRPA43-2Z	6140	2550	0.06
CRXPAX43-2RS	6140	2550	0.06
CRPN63-2ZR	15375	5775	0.19
CRXPNX63-2RS	15375	5775	0.19
CRPA63-2ZR	15375	5775	0.19
CRXPAX63-2RS	15375	5775	0.19

Assembly Dimensions & Tolerances



When installing Radial ball bearing rollers on your own structure we advise:

- Using a maximum of 2 concentric radial ball bearing rollers.
- Offset the seats of the concentric radial ball bearing rollers with respect to those of the eccentric radial ball bearing rollers according to the information below.

Designation	Y	E	N min.	Radius R
CRPN43-2Z	0.72	12 + 0.05/+0.02	5.5	1
CRXPNX43-2RS	0.72	12 + 0.05/+0.02	5.5	1
CRPA43-2Z	0.72	12 + 0.05/+0.02	5.5	1
CRXPAX43-2RS	0.72	12 + 0.05/+0.02	5.5	1
CRPN63-2ZR	0.55	18 + 0.02/-0.02	7	1
CRXPNX63-2RS	0.55	18 + 0.02/-0.02	7	1
CRPA63-2ZR	0.55	18 + 0.02/-0.02	7	1
CRXPAX63-2RS	0.55	18 + 0.02/-0.02	7	1

T-Rail

Fixed rails used as the main load bearing in radial and axial forces.

The rails are available in 4 different sizes: 18, 28, 43, 63 mm.

Longer single rails up to max. 4080 mm on request. For longer rail systems, see section "Joined rails" in Technical Information.

Dimensions in mm.

D1 Fixing holes for Torx® screws with low head (custom design) included in scope of supply.

D2 Fixing holes for countersunk head screws according to DIN 7991.

Material: Size 18, cold-drawn roller bearing carbon steel C43 F. Sizes 28-63 Cf53. Zinc-plated according to ISO 2081.

Rail raceways are induction hardened and ground

Max. Acceleration (m/s²): 20 (depending on application)

Max. Operating Speed (m/s): 9 (depending on application)

Max. Radial Load Capacity (N): 15,000 (per slider)

Temperature range (°C): -20 to +120

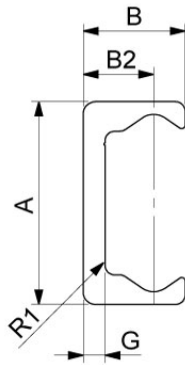


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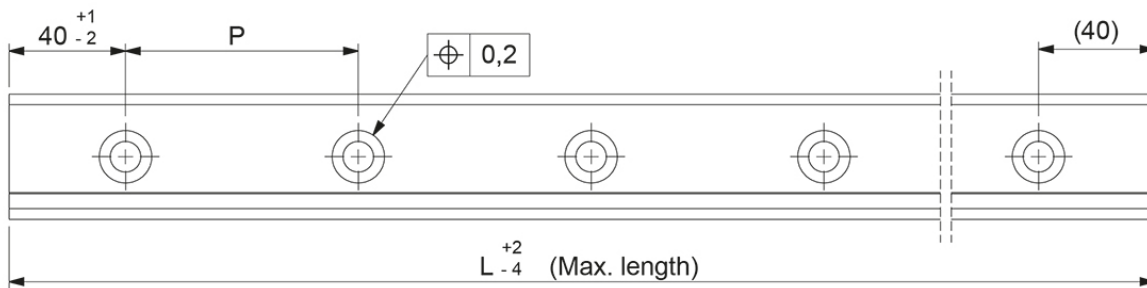
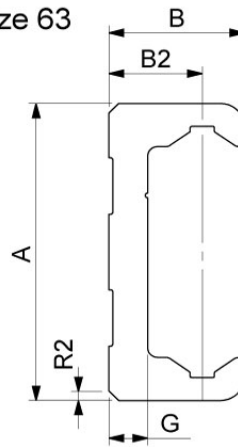
Designation	Size
TLC18	18
TLV18	18
TLC28	28
TLV28	28
TLC43	43
TLV43	43
TLC63	63
TLV63	63

Dimensions

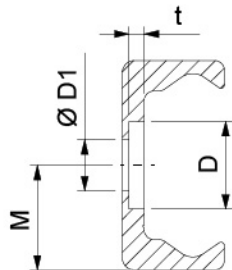
Size 18-43



Size 63

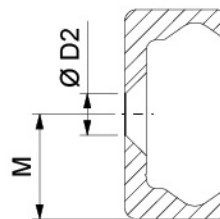


Rail with counterbored holes



TLC

Rail with countersunk holes



TLV

Designation	M	A	B	B2	R1	R2	L	D	D1
TLC18	9	18	8.25	5.75	1.5	-	2000	9.5	M4
TLV18	9	18	8.25	5.75	1.5	-	2000	9.5	M4

Dimensions

Designation	M	A	B	B2	R1	R2	L	D	D1
TLC28	14	28	12.25	8.5	1	-	3200	11	M5
TLV28	14	28	12.25	8.5	1	-	3200	11	M5
TLC43	21.5	43	21	14.5	2.5	-	4080	18	M8
TLV43	21.5	43	21	14.5	2.5	-	4080	18	M8
TLC63	31.5	63	28	19.25	-	2x45°	4080	15	M8
TLV63	31.5	63	28	19.25	-	2x45°	4080	15	M8

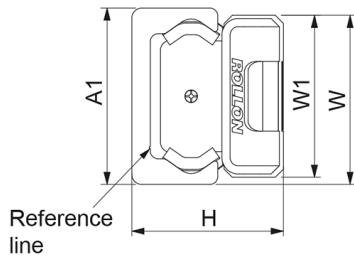
Designation	D2	t	G	P	Min. length
TLC18	M4	2	2.8	80	160
TLV18	M4	2	2.8	80	160
TLC28	M5	2	3	80	240
TLV28	M5	2	3	80	240
TLC43	M8	3.1	4.5	80	400
TLV43	M8	3.1	4.5	80	400
TLC63	M10	5.2	8	80	560
TLV63	M10	5.2	8	80	560

Load & Weight

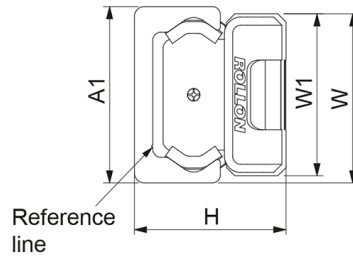
Designation	Weight Rail (kg/m)
TLC18	0.55
TLV18	0.55
TLC28	1.0
TLV28	1.0
TLC43	2.6
TLV43	2.6
TLC63	6.0
TLV63	6.0

Rail/Slider Combination

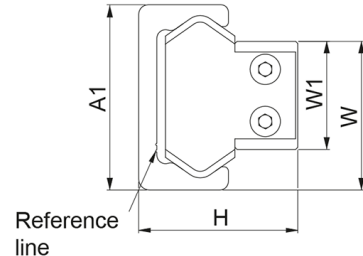
T-rail with NSW slider



T-rail with NSW slider



T-rail with CSW slider



Designation	A1	H (Rail+NSW/NSA)	H (Rail+NSD/NSDA)	H (Rail+CSW/CSWK)	W1 (Rail+NSW/NSA)
TLC18	18 (+0.25/-0.10)	16.5 (±0.15)	n/a	15 (±0.15)	16 (0/-0.2)
TLV18	18 (+0.25/-0.10)	16.5 (±0.15)	n/a	15 (±0.15)	16 (0/-0.2)
TLC28	28 (+0.25/-0.10)	23.9 (±0.15)	23.9 (±0.15)	23.9 (±0.15)	24.9 (0/-0.2)
TLV28	28 (+0.25/-0.10)	23.9 (±0.15)	23.9 (±0.15)	23.9 (±0.15)	24.9 (0/-0.2)
TLC43	43 (+0.35/-0.10)	37 (±0.15)	37 (±0.15)	37 (±0.15)	39.5 (0/-0.2)
TLV43	43 (+0.35/-0.10)	37 (±0.15)	37 (±0.15)	37 (±0.15)	39.5 (0/-0.2)
TLC63	63 (+0.35/-0.10)	50.5 (±0.15)	n/a	49.8 (±0.15)	60 (0/-0.2)
TLV63	63 (+0.35/-0.10)	50.5 (±0.15)	n/a	49.8 (±0.15)	60 (0/-0.2)

Designation	W1 (Rail+NSD/NSDA)	W1 (Rail+CSW/CSWK)	W (Rail+NSW/NSA)	W (Rail+NSD/NSDA)	W (Rail+CSW/CSWK)
TLC18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
TLV18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
TLC28	24.9 (0/-0.2)	14.9 (0/-0.10)	26.45 (+0.1/-0.3)	32 (+0.1/-0.3)	21.7 (+0.05/-0.35)
TLV28	24.9 (0/-0.2)	14.9 (0/-0.10)	26.45 (+0.1/-0.3)	32 (+0.1/-0.3)	21.7 (+0.05/-0.35)
TLC43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.10/-0.30)
TLV43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.10/-0.30)
TLC63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/-0.30)
TLV63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/-0.30)

U-Rail

Floating rails are used for load bearing of radial forces and, in combination with the fixed bearing T-rail or compensation K-rail, as a support carrier for occurring moment loads.

The rails are available in 4 different sizes: 18, 28, 43, 63 mm.

Longer single rails up to max. 4080 mm on request. For longer rail systems, see section "Joined rails" in Technical Information.

Dimensions in mm.

D1 Fixing holes for Torx® screws with low head (custom design) included in scope of supply.

D2 Fixing holes for countersunk head screws according to DIN 7991.

Material: Size 18, cold-drawn roller bearing carbon steel C43 F. Sizes 28-63 Cf53. Zinc-plated according to ISO 2081. Rail raceways are induction hardened and ground

Max. Acceleration (m/s²): 20 (depending on application)

Max. Operating Speed (m/s): 9 (depending on application)

Max. Radial Load Capacity (N): 15,000 (per slider)

Temperature range (°C): -20 to +120

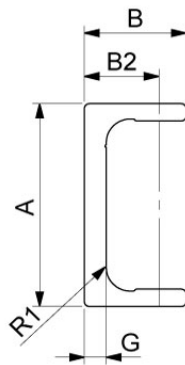


General Data

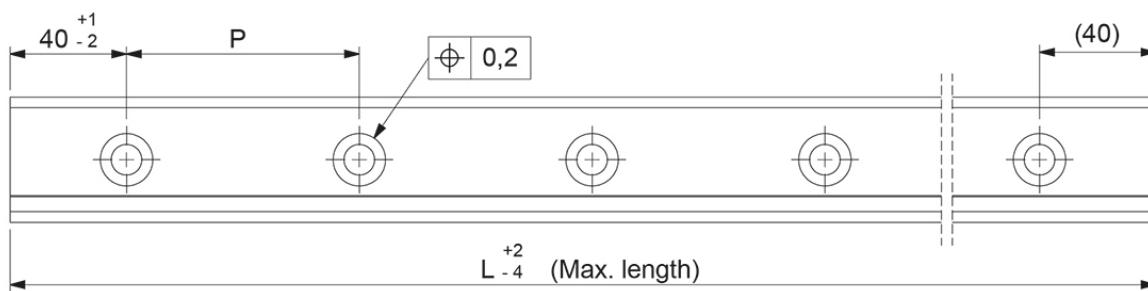
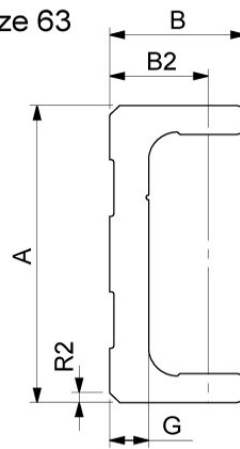
Designation	Size
ULC18	18
ULV18	18
ULC28	28
ULV28	28
ULC43	43
ULV43	43
ULC63	63
ULV63	63

Dimensions

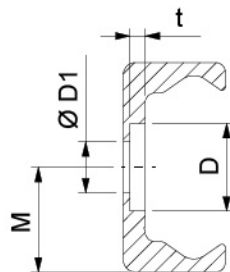
Size 18-43



Size 63

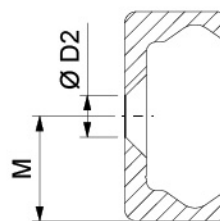


Rail with counterbored holes



ULC

Rail with countersunk holes



ULV

Designation	M	A	B	B2	R1	R2	L	D	D1
ULC18	9	18	8.25	5.75	1	-	2000	9.5	M4
ULV18	9	18	8.25	5.75	1	-	2000	9.5	M4

Dimensions

Designation	M	A	B	B2	R1	R2	L	D	D1
ULC28	14	28	12	8.5	1	-	3200	11	M5
ULV28	14	28	12	8.5	1	-	3200	11	M5
ULC43	21.5	43	21	14.5	1	-	4080	18	M8
ULV43	21.5	43	21	14.5	1	-	4080	18	M8
ULC63	31.5	63	28	19.25	-	2x45°	4080	15	M8
ULV63	31.5	63	28	19.25	-	2x45°	4080	15	M8

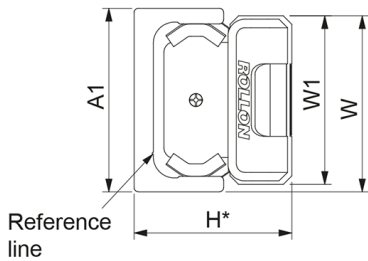
Designation	D2	t	G	P	Min. length
ULC18	M4	1.9	2.6	80	160
ULV18	M4	1.9	2.6	80	160
ULC28	M5	2	3	80	240
ULV28	M5	2	3	80	240
ULC43	M8	3.1	4.5	80	400
ULV43	M8	3.1	4.5	80	400
ULC63	M10	5.2	8	80	560
ULV63	M10	5.2	8	80	560

Load & Weight

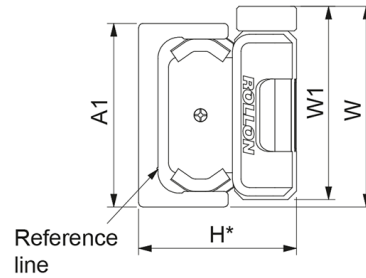
Designation	Weight Rail (kg/m)
ULC18	0.55
ULV18	0.55
ULC28	1.0
ULV28	1.0
ULC43	2.6
ULV43	2.6
ULC63	6.0
ULV63	6.0

Rail/Slider Combination

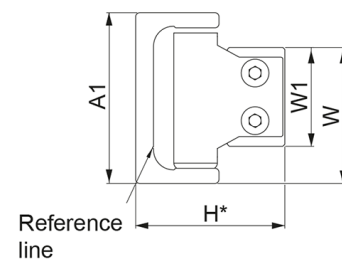
U-rail with NSW slider



U-rail with NSD slider



U-rail with CSW slider



* Nom. value

Designation	A1	H (Rail+NSW/NSA)	H (Rail+NSD/NSDA)	H (Rail+CSW/CSWK)	W1 (Rail+NSW/NSA)
ULC18	18 (+0.25/-0.10)	16,5*	n/a	15*	16 (0/-0.2)
ULV18	18 (+0.25/-0.10)	16,5*	n/a	15*	16 (0/-0.2)
ULC28	28 (+0.25/-0.10)	23.9*	23.9*	23.9*	24.9 (0/-0.2)
ULV28	28 (+0.25/-0.10)	23.9*	23.9*	23.9*	24.9 (0/-0.2)
ULC43	43 (+0.35/-0.10)	37*	37*	37*	39.5 (0/-0.2)
ULV43	43 (+0.35/-0.10)	37*	37*	37*	39.5 (0/-0.2)
ULC63	63 (+0.35/-0.10)	50.5*	n/a	49.8*	60 (0/-0.2)
ULV63	63 (+0.35/-0.10)	50.5*	n/a	49.8*	60 (0/-0.2)

Designation	W1 (Rail+NSD/NSDA)	W1 (Rail+CSW/CSWK)	W (Rail+NSW/NSA)	W (Rail+NSD/NSDA)	W (Rail+CSW/CSWK)
ULC18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
ULV18	n/a	9.5 (0/-0.05)	17 (+0.1/-0.3)	n/a	14 (+0.05/-0.25)
ULC28	24.9 (0/-0.2)	14.9 (0/-0.10)	26.45 (+0.1/-0.3)	32 (+0.1/-0.3)	21.7 (+0.05/-0.35)
ULV28	24.9 (0/-0.2)	14.9 (0/-0.10)	26.45 (+0.1/-0.3)	32 (+0.1/-0.3)	21.7 (+0.05/-0.35)
ULC43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.15/-0.30)
ULV43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	47 (+0.2/-0.4)	34.3 (+0.15/-0.30)
ULC63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/ -0.30)
ULV63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/ -0.30)

K-Rail

The compensation rails are used for the load carrier of radial and axial forces. Tolerance compensation in two planes in combination with the U-rail. A combination of compensating rail and floating rail (K+U system) manages both parallel deviations and angular errors. The unique raceway contour of the K-rail allows the slider a certain rotation around its longitudinal axis, with the same linear precision as with a T-rail. The K-rail must be mounted in such way that the radial load of the slider is always supported by at least 2 rollers on the slider, which lie on the V-shaped raceway of the rail.



The rails are available in 2 different sizes: 43, 63 mm.

Longer single rails up to max. 4080 mm on request. For longer rail systems, see section "Joined rails" in Technical Information.

Dimensions in mm.

D1 Fixing holes for Torx® screws with low head (custom design) included in scope of supply.

D2 Fixing holes for countersunk head screws according to DIN 7991.

Material: Cf53. Zinc-plated according to ISO 2081. Rail raceways are induction hardened and ground.

Max. Acceleration (m/s²): 20 (depending on application)

Max. Operating Speed (m/s): 9 (depending on application)

Max. Radial Load Capacity (N): 15,000 (per slider)

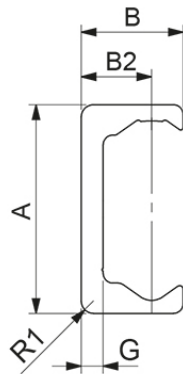
Temperature range (°C): -20 to +120

General Data

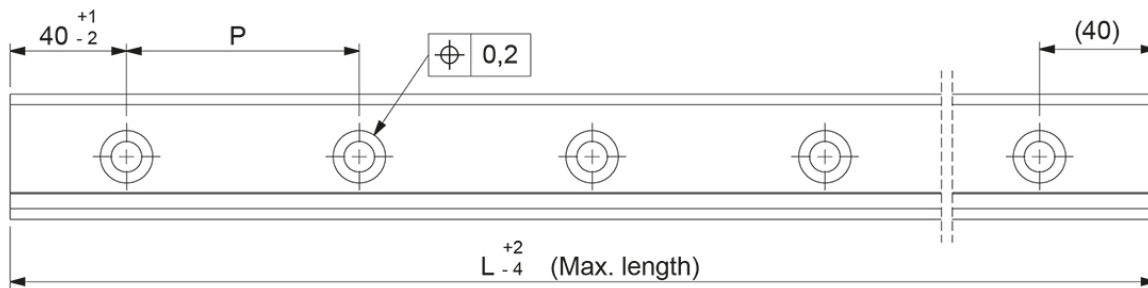
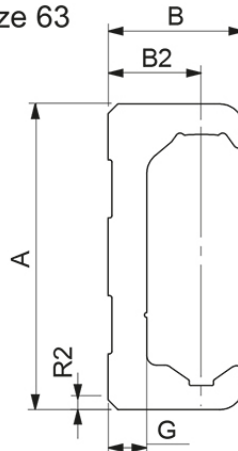
Designation	Size
KLC43	43
KLV43	43
KLC63	63
KLV63	63

Dimensions

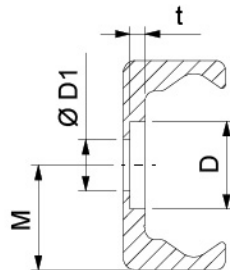
Size 43



Size 63

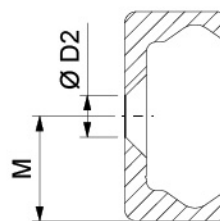


Rail with counterbored holes



KLC

Rail with countersunk holes



KLV

Designation	M	A	B	B2	R1	R2	L	D	D1
KLC43	21.5	43	21	14.5	2.5	-	4080	18	M8
KLV43	21.5	43	21	14.5	2.5	-	4080	18	M8

Dimensions

Designation	M	A	B	B2	R1	R2	L	D	D1
KLC63	31.5	63	28	19.25	-	2x45°	3600	15	M8
KLV63	31.5	63	28	19.25	-	2x45°	4080	15	M8

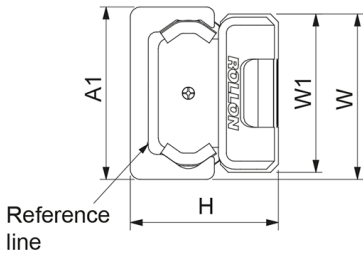
Designation	D2	t	G	P	Min. length
KLC43	M8	3.1	4.5	80	400
KLV43	M8	3.1	4.5	80	400
KLC63	M10	5.2	8	80	560
KLV63	M10	5.2	8	80	560

Load & Weight

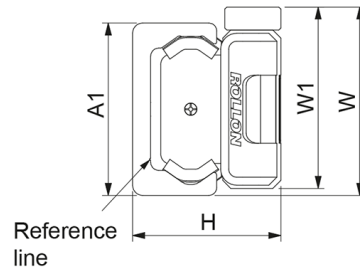
Designation	Weight Rail (kg/m)
KLC43	2.6
KLV43	2.6
KLC63	6.0
KLV63	6.0

Rail/Slider Combination

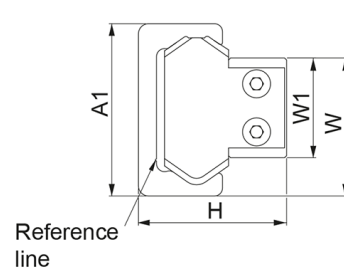
K-rail with NSA slider



K-rail with NSDA slider



K-rail with CSWK-slider



The K-rail enables the slider to twist around its longitudinal axis.

Designation	A1	H (Rail+NSW/NSA)	H (Rail+NSD/NSDA)	H (Rail+CSW/CSWK)	W1 (Rail+NSW/NSA)
KLC43	43 (+0.35/-0.10)	37 (±0.15)	37 (±0.15)	37 (±0.15)	39.5 (0/-0.2)
KLV43	43 (+0.35/-0.10)	37 (±0.15)	37 (±0.15)	37 (±0.15)	39.5 (0/-0.2)
KLC63	63 (+0.35/-0.10)	50.5 (±0.15)	n/a	49.8 (±0.15)	60 (0/-0.2)
KLV63	63 (+0.35/-0.10)	50.5 (±0.15)	n/a	49.8 (±0.15)	60 (0/-0.2)

Designation	W1 (Rail+NSD/NSDA)	W1 (Rail+CSW/CSWK)	W (Rail+NSW/NSA)	W (Rail+NSD/NSDA)	W (Rail+CSW/CSWK)
KLC43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	41.25 (+0.2/-0.4)	34.3 (+0.10/-0.30)
KLV43	39.5 (0/-0.2)	24.9 (0/-0.15)	41.25 (+0.2/-0.4)	41.25 (+0.2/-0.4)	34.3 (+0.10/-0.30)
KLC63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/-0.30)
KLV63	n/a	39.5 (+0.15/0)	61.5 (+0.2/-0.4)	n/a	51.6 (+0.15/-0.30)

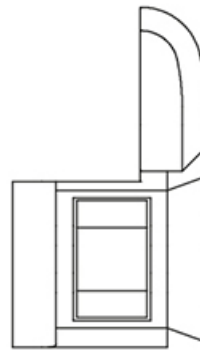
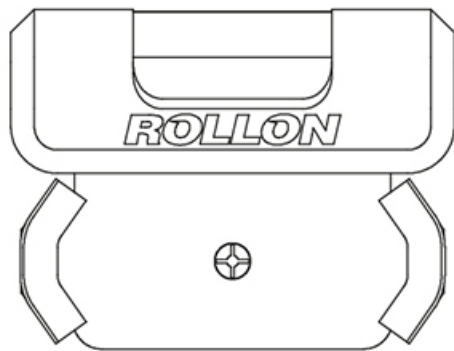
ZK-WNS Wipers

Pair of wipers for NSW/NSA/NSD/NSDA-sliders. The slider heads are equipped with special slow release felt pads and are free to rotate with respect to the slider body, so that the felts are always in contact with the raceways to ensure a perfect lubrication. The felts can be greased through a dedicated oil refilling access on the front of the head, simply by means of a syringe oiler.

All NSW/NSA/NSD/NSDA-sliders have wipers assembled and adapted to work on the different raceway shapes.



General Data

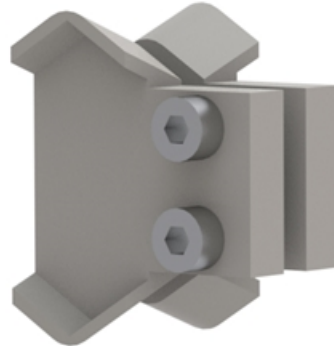


Designation	Size
ZK-WNS18	18
ZK-WNS28	28
ZK-WNS43	43
ZK-WNS63	63

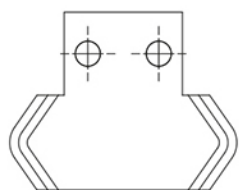
ZK-WCS Wipers

Pair of wipers for CSW/CSWK-sliders. To keep the raceways free of contamination and ensure a longer service life.

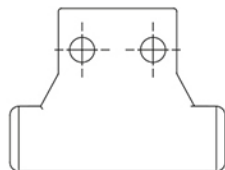
For CSW/CSWK-sliders, the wipers are delivered un-assembled and need to be correctly oriented and laterally adjusted to the rail. In cases when a complete system of rail + slider(s) is ordered, wipers are already assembled, oriented, and adjusted to the rail.



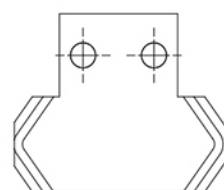
General Data



Wiper WCST for T-rail



Wiper WCSU for U-rail



Wiper WCSK for K-rail

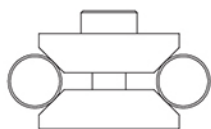
Designation	Size	Compatible with
ZK-WCST18	18	T-rail
ZK-WCST28	28	T-rail
ZK-WCST43	43	T-rail
ZK-WCST63	63	T-rail
ZK-WCSU18	18	U-rail
ZK-WCSU28	28	U-rail
ZK-WCSU43	43	U-rail
ZK-WCSU63	63	U-rail
ZK-WCSK43	43	K-rail
ZK-WCSK63	63	K-rail

Joining rail alignment fixture

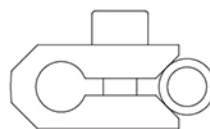
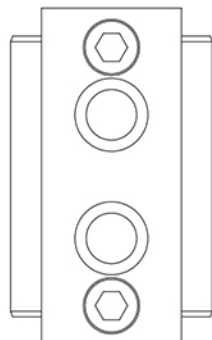
The joining rail alignment fixture AT / AK is used during installation of joined rails in order to precisely align the rails with each other. Joining rail alignment fixture AT for joined T-and U-rails. Joining rail alignment fixture AK for K-rails.



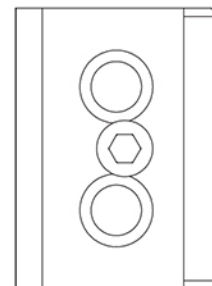
General Data



Alignment Fixture AT
for T- and U-rails



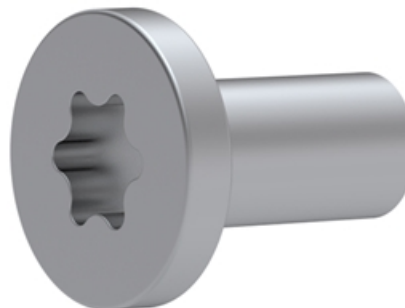
Alignment Fixture AK
for K-rail



Designation	Size	Compatible with
AT18	18	T- and U-rails
AT28	28	T- and U-rails
AT43	43	T- and U-rails
AT63	63	T- and U-rails
AK43	43	K-rail
AK63	63	K-rail

Fixing screws

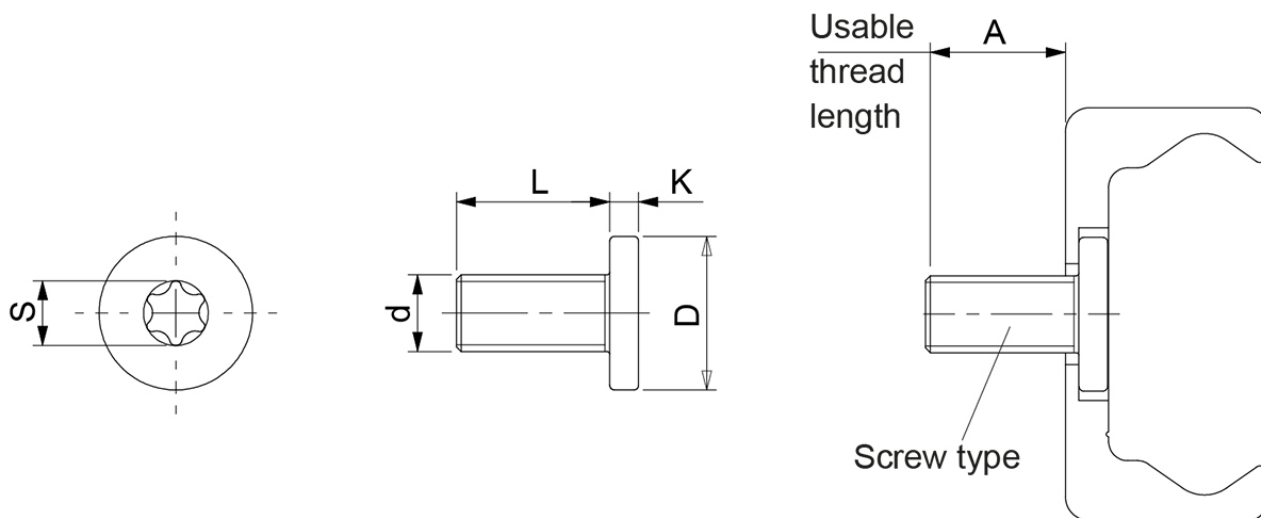
When a rail with counterbored holes is delivered, the Torx® screws are provided in the right quantity.



General Data

Designation	Size	Tightening Torque (Nm)
Torx size 18 M4x8	18	3
Torx size 28 M5x10	28	9
Torx size 43 M8x16	43	22
Torx size 63 M8x20	63	35

Dimensions



Designation	A	L	d	D	K	S
Torx size 18 M4x8	7.2	8	M4 x 0.7	8	2	T20
Torx size 28 M5x10	9	10	M5 x 0.8	10	2	T25
Torx size 43 M8x16	14.6	16	M8 x 1.25	16	3	T40
Torx size 63 M8x20	17.2	20	M8 x 1.25	13	5	T40

Oiling syringe

Precision oil lubrication syringe with a dedicated pump head. Comes in a compact format and is suitable for oil lubrication. Easy to refill NS-series sliders. Same size for all models. Screwable protection cap.

The NS-sliders are equipped with wiper heads that include lubricated felts which slowly release oil on the raceways for a long time. The wiper heads can be recharged from the front through a dedicated access hole by means of an oiling syringe. When refilling the oil or the substituting the wiper heads, it is recommended to clean the raceways of the guide.



General Data

Designation	Size
BGS	One size for all models

RA Grease

NLGI grade 1.5

Clear grease based on synthetic oils and PTFE. Will fulfil all severe specifications from bearing manufacturers, industrial applications and vehicle producers. Very suitable for use where long service life is required and desired. The specific rheological properties of the lubricant will give very low good flow properties of the grease at extremely low temperatures, at the same time the high film strength and thickness will guarantee lubrication also at elevated temperatures. The type of PTFE used will adhere strongly to all surfaces lubricated and give a very low friction coefficient. The grease is water resistant, withstands oxidation, has very good mechanical stability, is completely non-toxic and provides a very wide application temperature range.

Temperature: -40 to +260 °C (application range)



General Data

Designation	Remark	Colour	Weight (g)
RA Grease NLGI 1.5	Cartridge package	Translucent white	400 g

Adjustment Key

For adjustment of Compact Rail sliders.

Please note that adjustment key is always included in the delivery of Compact Rail slider.



General Data

Designation	Compatible with
CK18-1	Slider size 18
CK43-1	Slider size 43
CK63-1	Slider size 63
CK28-1	Slider size 28